A STUDY ON

KIRANI KAZHICHAL NOI

(Amoebiasis)

DISSERTATION SUBJECT

Submitted to

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CERTIFICATE

Certified that I have gone through the dissertation submitted by Dr.K.Gomathi a student of final M.D.(s), Branch-I Maruthuvam, Govt. Siddha Medical College, Chennai and the dissertation work has been carried out by the individual only.

Place: Chennai

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CONTENTS

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INTRODUCTION

INTRODUCTION

The quest for healthy body and healthy mind has been an incessant urge in human being all over the world. The present millennium is asking for natural & safe treatment method for the same. The W.H.O estimated that approximately 60-70% of the earth's in habitants relay on traditional medicine for their health.

The philosophy of siddha gives us an understanding of the connection between body, mind & soul and offers advice for a more natural healthy life style. Since siddha system looks at health and illness in a holistic way and considers the patients specific qualities & personality as well as the socio-economic environment in which he lives, the treatment developed can be employed anywhere, any time.

As per the saying

"Health is Wealth"

a nation's wealth is its population of healthy people.

W.H.O and other health assembly resolution have reaffirmed that,

"Health is a basic human right
and social goal".

The doctrine of siddha as revealed by the siddhars is that all the living and nonliving things are a combination of live primordial element mann, neer, thee, vali, vin.

The human is based on five physical elements of the universe (mann, neer, thee, vali, vin). Sky, air, fire, water, earth. A detailed account of these five elements as described in siddha is known as Humoral pathology.

Humoral pathology explains that three humours namely vaatha, pitha and kapha maintain (up keep) of the human body. The normal order, vatha consists of sky and air, pitha consists of fire and kapha consists of water and earth is in the proportion of 1: ½ : ¼ respectively. Any upset in this proportion of the three humours is sick to leading disease according to the derangements.

The Theivapulavar described as, in Thirukkural,

"kf|Dk Fiwa|Dk Neha nra AkE}Nyhh
ts|Kjyh vz za %dW"

j|UfFws

The human body is based on the five physical elements of the external world.

It is said in Thirukkural,

"Rit xs| CW Xir ehwwk vdw lej|d
tif njh|thdfl|Nf cyF"

j|UfFws

Amoebiasis is usually caused by entamoeba histolytica, a potentially pathogenic intestinal amoeba that is spread between humans by its cysts. It is common throughout the tropics and occasionally acquired in Britain.

The author selected the diseases kirani for the clinical study dissertation work on the basis of siddha aspect. The present work is the combination of datas collected during the course of study for three years in maruthuvam branch, post graduate study and research centre of Govt. Siddha Medical College Chennai-106.

AIM AND OBJECTIVE

AIM & OBJECTIVE

The main aim of this study is to do a clinical study in **"Kirani"** with keen interest and observation on the etiology. Pathology, diagnosis, complications and the treatment aspects using a time honoured siddha medicines.

1. **Mangottai Paruppu Chooranam**
2. **Jathikkai Karkam**

having efficacy for the disease.

THE STUDY INCLUDES:

1. Collection & detailed study of various siddha & modern teratures dealing with aetiology & symptoms. Diagnosis, prognosis, complications, diet therapy & treatmental aspects of kirani.
2. To expose the efficiency of siddhars diagnostic principles.
3. To have an idea of the incidence of the disease with reference to sex, age, habit, occupation, income & social status of the patient.
4. To do basic analysis an Bio-Chemical & anti microbial, anti-protozoal, anti diarroheal activities and pharmacological action of the siddha medicines tried on this disease.
5. To collect both siddha & modern literatures related to Kirani (Amoebiasis).
6. To evaluate the pathology of **"Kirani Noi"** by concentrating on mukkutram, poripulangal, udal kattugal, envagai thervugal extra.
7. To have a clinical trial with medicines Mangottai Paruppu Chooranam & Jathikkai Karkkam in I.P G.S.M.C, Chennai during the period of 2004-2005 to 2007-2008.

REVIEW OF LITERATURE

SIDDHA ASPECT

REVIEW OF LITERATURE

SIDDHA ASPECT

The disease Kirani is mentioned in various siddha literatures.

VERU PEYAR: (Synonym)

(Cd forry) oon kazhichal, pala nira kazhichal, kodiya kazhichal, naarung kazhichal, kirani, kirahani, theepethi.

IYAL: (Definition)

1. The uppermost extremity or the receiving ducts of the intestines. It is situated between the intestines and the duodenum. It is affected by causes which produces dullness of appetite. So indigested food materials with lymph drainage causes mucus with stools.
2. A disease in which the food taken is passed off in the shape of undigested feacal matter or if digested, produce sometimes either constipation or liquid motions accompanied by both cases by pain and foul smell.
3. A long continued (or) chronic diarrhoea that is continued looseness of the bowels resulting from neglected diarrhoea. It is supposed to be caused by the derangement of the three humours in the system.

T.V. Samba Sivam Pillai, Vol-2

Page: 1432

1. Due to dyspepsia & indigestion and causes inflammation of the large intestines produces the lymph with Stool. So it is called **"Nina Kazhichal"**.
2. Necrotic tissue of intestines is mixed with stools. So it is called **"Oon Kazhichal"**.
3. Decomposed parts of intestines with stool is present. It will produce foul smelling. So it is called **"NaarungKazhichal"**.
4. Stool is mixed with mucus & blood. So it is called **"Pala-Nira-Kazhichal"**.

NOI VARUM VAZHI (Aetiology)

It is worth while to mention the poem of **"Yoogi Maa Munivar"** who is the authority of siddhar regional and humoral pathology.

As per the A+fi t jja rejhkz 196 Page

"khnddw tawwdkej kUfFk NghJ
khggz l kJuqfs kqif Nfh\b
Cnddw khkrqfs Ntfhg gzlk
czljhw fuhzteJw gtfFq fzlha"
609

As per the Nahf Qhd rh]juj julL -8k ghfk> Page 203

"fsrrw fuhz MWtjq Nfs
msrra gjj kdthj kaak
njsrra thaT NrhejJ %dwy
gsrnrdg Ngjahk ghhngyk NghNk"
ghly 64

As per the mfjjah Fz thflk> Page 52

"ghNue fuhz tif ahUfF kggh
gfFtkh Azlhfk tjjij Nfsha
CNue ehlnrdw rjNgjfF
cjjkNd fuhznadW cWj nrhyY
Nguhd ngUqFlYfFk kyfFlYfFk
ngykhd tjdrNylLk rtTfFejhd
fhNue nfhjggdhy ,uzKzlhff
fzbggha ,eNeha jhd gwfFqjhNd"

202

As per the jU%yh fUffil itjjak - 600> Page 38

"forry fuhzf foAk tjqNfS
morra gjjk mdythjk lakhk
nrOrra thA Nrhejit %dwhy
gornrd NgjfFk ghhngyk NghNk"

77

As per the ifnaOj Jg guj

"fuzg gwgigf fsfFq fhiy
rukb kejk rhUk NghJ
khtd gzl khf tUejy
NkT kJu gzlk tUkgy
jhT kqifah jkikr Nruy
NtT khkrk Ntfhg gzlk
czgjhNy Aww nfhLik
kzz tUnkd tFffyhNk"

1. Lack of treatment of loss of appetite will induce indigestion and aggravate the three thoshas will leads to Kirani.
2. Lack of treatment for chronic diarrhoea, will produce ulcer over the intestines and causes the **Kirani Noi**.
3. Excess sweet intake, meat, excessive intake of carbohydrate, intake of calcium water, may produce dyspepsia and causes the Kirani.

MURKURI GUNANGAL

1. Discomfort feeling in the abdomen.
2. Fullness of the abdomen even in doesn't having food.
3. Tenesmus pain.
4. Saliva secretion is increased.
5. Nausea.
6. Hiccough.
7. Borborying.
8. Diarrhoea.
9. Plunching.
10. Water brash.

"GfYq fuhz KwFwNghwwd
jJNt Aiuffjjho FoNy Nfsha
GrfF kddk nghWjJr nrhjjy
erGs Vggk eyy thaeh
Cw yNuhrf KjL %yhjy
NrhhKf tfhuQ Ruejiy NjhT
taW tFjjy teJ nghUky
gay fhjiurry ghuhahrk
Fly yiurry nfhsSl yisjjy
Gilf fzljJs Gif fkkaJNghy
fhzg gLjy iffhy tffk
NgL kaffk nghha %hrir
kygejKNk kdW kdNw
rygy E}yfs nrgGkhNjh"

(ifnaOj Jg guj)

1. Indigestion.
2. Plunching & water brash.
3. Excessive salivary secretion.
4. Anorexia.
5. Dryness of the lips.
6. Tiredness.
7. Fever.
8. Headache.
9. Tinitus of the ear.
10. Fatigue.
11. Borborygmus.
12. Malaise.
13. Odema over the hands & feet.
14. Giddiness.
15. Constipation.

NOI ENN (Classification)

“,ej tifa yakga fu` z
Kej thjk gjjQ Nrj Jkk
njhej K\ze Jiz aejuthA
tej %ythANt Fdkj Jld
fUgg nkhlL fsUe rqfu
fufz gjndhdnwddf fsggh”
(ifnaOj Jg guj)

1. “ehl lNt fuhz jhd gjndhdwhFk
eykhF Kwgjjg ngaiuf Nfsha
thl lNt thjkhk gjj fuhz
tifahd rNyl LknkhL njhejf fuhz
Cl lNt c\z thAf fuhz
cahfdw mejukhk thAf fuhz
%l lNt %ythAf fuhz
Kjh Fdkf fuhz nfhgf fuhz ahUNk”

2. MnkhlLf fuhz NahL rqfuff fuhz

(Afi itjja rejhkz Page – 173)

According to Yugi Munivar, Kirani is classified into 11 types.

fuhz – Neha vz

“$W %yf fuhz nadf
FwfFk thjf fuhz nadWk
NjWk gjjf fuhz vdWk
njsAk rNyjkf fuhz vdWk
NfhWQ rOf fuhz nadWk
FwfFk ehd fuhz nadWk
MWq fuhz gwejtjk
miwejhh Kdtu iwejhNu

(MtasfFk mKjKiw RUffk Page 314)

(Mjkulrhkhj tajja rhu rqfufk Page cUU)

In Yugi Muni Vaithiya Chinthamani Kirani is classified into 11 types. They are,

1. Vali kirani
2. Azhal kirani
3. Iyya kirani
4. Mukkutra kirani
5. Azharkal kirani (ushna vayu kirani)
6. Melkudarkal kirani (Anthara vayu kirani)
7. Keelzh kudarkal kirani (moola vayu kirani)
8. Kunma kirani
9. Sool kirani (karpa kirani)
10. Ottu kirani
11. Erichal kirani (sangaraga kirani)

In ”Aaviyalikkum Amuthamurai Churukkam”

Kirani is classified into 6 types,

1. Vatha kirani
2. Pitha kirani
3. Kapa kirani
4. Mukkutra kirani
5. Cheezh kirani
6. Neer kirani

Types of Kirani Noi:

1. ts ezffo rry (thj fuhz)

“NehthFk eLtaW cggrk jhFk
Elgkhk grnaLfF Klkg yhj Je
jthFQ rjkha taW NghFk
rjWNk kyejhDk thA jddhy
fhthFq flbaha tawww fhDq
fhwWNk kfffoAq fWgG khFk
ghthFk gontyyk NghNy tOk
gLthjf fuhzalg gzg jhNk”

(Af itjja rejhkz page - 198)

1. Distension of the abdomen
2. Stools with mucus present
3. Malaise
4. Dimness of vision
5. Pain in the ribs, neck, chest, knee joint
6. Mass present in the abdomen
7. Diarrhoea with frothy stool present
8. Stool is black in colour

2. Azhal Kirani:

"g z ghf eLtaW Nehffh lhFk
gyehdh tjkhf taW NghFk
kzghf taW foA Kwff Kz lhk
khrww eukngyyhe jsheJ njhqFk
c zghf T ndyyhq foeJ NghFk
csnfhLfFk kUejoA Kzhrr Nflhk
ngzghf Ngdjiy tl^heJ NghFk
gjjjjd fuhznad NgryhNk"

(Af rejhkz page - 198)

1. Pain in abdomen
2. Multicolour stool
3. Foul smell stool
4. Nerve weakness
5. Stools with mucus
6. Lose of sensation

3. Iyya Kirani:

"NgrNa moyNghy ehww khFk
ngUffNt ntSgghf kyejhd NghFk
fhrNa iffhYe jshrr Nflhk
fsskhaf fharrytUq fzrtfFk
ehrNa ehNthL twlr fhDk
eaeJNk ghisahaf FlyNghy tOk
MrNa awtyyh jrj ahFk
mjlbNa tffytUQ rNylLke jhNd"

(Af itjja rejhkz page - 199)

1. Foul smelling & pale colour stool.
2. Fever.
3. Redness of the eye.
4. Dryness of the tongue & nose.
5. Mucus in the stool.

4. Mukkutra Kirani:

"tUFNk jhgKld fharry jhDk
kfjjhd NtiyNghy tawwiurry
jUFNk jiytyAq Fsh eLffk
jdgghy Nghy kfffoAkbff bfF
gUFNk gfonadg ghAk thA
ghjhg KoiynahL vhT khFk
fUFNk fhy ifAk Gwsfhy tqFk
frnjhejf fuhznadf fzL nfhsNs"

(Af itjja rejhkz page - 199)

1. Fever.
2. Borborygmus.
3. Milky white stool.
4. Rigor, Headache.
5. Burning sensation.
6. Odema in the feet.
7. Abdominal pain.

5. Azharkal Kirani :

”f z Lnfhs S kyej idNa aWf f nfhz L
fdkhf taw iueJ cgg rkjhFk
gz Lnfhz l mrdejhd nrhj j lhJ
ghqfhd Gs jNj fFk thaeUWk
t z Lnfhz l fhy if A krj ahFk
Nkd Nah k f f fUf nky T khFk
c z Lnfhz l ehz %dww Ngj ahFk
c z U \ z thAntd Nw Aiuf fyhNk”

(Af i t j j a r ejhk z page - 199)

1. When Azhal kuttram is increased, it will disturb the kilnokku kall and produce **Kirani Noi**.
2. Distension of abdomen.
3. Indigestion.
4. Excessive salivary secretion.
5. Black colour of the body.
6. Alternative diarrhoea for 3 days.

6. Melkudarkkal Kirani:

"c iuffNt gjjaejhd nfhzl NghJ
cWjaha kyejss Gsjnjf flLj
jiuffNt rjjNahL mUrahFe
jhfKzlhaj jhdUfFe jshrr ahFk
tiuffNt tyhggffk ,rTkhFk
Nkdnayyhk ntSgghFk tffYzlhk
miuffNt mrdejhd nrhjjlhJ
mejukhk thAtl Mzik jhNd"

(Af itjja rejhkz page - 199)

1. Melkudarkal increased and causes the kirani.
2. Vomitting.
3. Anorexia.
4. Thirst.
5. Hiccough.
6. Fatigue.
7. Pain in the both intercostal area.

7. Keelzhh Kudarkal Vayu Kirani:

"Mzikaha thAjddy kfgG uzLk
mbtawiwg nghUkNa kyk twzL
jhzikahar rlktww kejgGzlhar
rjjkhaj jzahj ,iurr yhFk
Nfzikah abjJilaw FjjYzlhk
nflbahk rhukJ foKfkhFk
%zikahq Fjqjddd KisNghy NjhdWk
%ythAf fuhznad nkhoa yhNk"

(Af itjja rejhkz page - 200)

1. Keelzhh Nokku kal increased.
2. Indigestion.
3. Borborygmus.
4. Pain present in the thigh.
5. Pain in the knee joint.
6. Constipation.

8. Kunma Kirani:

“nkhoaNt jiyjhDq fdjjUfF
nkhoTwff Kzlhfk gis rhUk
foaNt tyhntyyh Kyhtf Fj Jk
rkurkha jhd tahffk jiy eLffk
coaNt clknghgG KoiyahFk
cggNa tawJT kiwQr NghFk
toaNt tawwnahU Gwjjw whDk
fisrR nui \ NghL Fdk fuhzahNk

(Af itjja rejhkz page - 200)

1. Heaviness of head.
2. Loss of vision.
3. Diarrhoea.
4. Grambling pain in the abdomen.
5. Borborygmus.

9. Sool Kirani

“tisrRNk taWfoAq fLgG Kzlhk
thbNa fhyifAk ntrnrdwhFk
fisrRNk fzjhD kQrshFq
foANk gytjkhaf fbd jhfk
cisrRNk nfhgge jhDaUq fhyk
cWtddk thejah Aoiy ahFk
KisrRNk nfhggejhd fNo toy
KLfhJ nfhggkhq fuhz jhNd”

(Af itjja rejhkz page - 200)

1. During pregnancy time it will come (or) after delivery (or) puerperal stage it will come.
2. Multi colour stool.
3. Burning sensation over hands & feet.
4. Dyspnoea.
5. Vomitting.
6. Stomach Pain.

10. Ottu Kirani

“jhdhd gLfifNa ,jkhaf fhDk
tygGNk ,isgghfj jhdUfFk
thdhd taWty nkjjthFk
khhNghL tyh KJF tyAzlhFk
Xdhd Jlbilaha taW NghFk
xUkjJg Nghfhky kyKQ rfFk
Njhdhd njhgGsjdy tisayNghyr
RlblNt RUffkh nkhlLffuhz

(Af itjja rejhkz page - 201)

1. Grambling pain in the abdomen.
2. Pain in the chest, ribs, thoracic region.
3. Multicolour stool.
4. Emaciation.
5. Stress.

11. Erichal Kirani

"RUffkh AjukJ nghUkyhfr
NrhWnrh ahf forr yghdr #lha
FUffkhaf Fjejd Ny eidjyhfr
FWtahitr RuNkhL mdyhaf fhZk
kUffkha thejaha kd kWfFk
khhg Ny Nfhiofl Lk kaffkhFk
rUffkhaf fzfsuz Lk RowrahFQ
rqfuff fuhz nad Nw rhwwyhNk**"**

(Af itjja rejhkz page - 201)

1. Undigested food material present in the stool.
2. Diarrhoea.
3. Heavy fever.
4. Vomitting.
5. Expectoration.
6. Giddiness.
7. Shunken eyes.

Kirani Noi – Pothu Kurigunangal:-

1. Anorexia
2. Indigestion

3. Plunching
4. Vomiting
5. Hiccough.
6. Diarrhoea
7. Offensive odour
8. Multi colour diarrhoea
9. Dryness of the tongue
10. Thirst
11. Headache
12. Malaise
13. Giddiness
14. Anemia
15. General weakness

Kirani Noi follows some diseases:-

1. Chronic diarrhoea
2. Rectal ulcer
3. Rectal polyp
4. Fever
5. Tuberculosis
6. Anemia
7. Liver disease
8. Ascites

Note:

Diarrhoea will occur before taking food and after taking food.

MUKKUTRA IYAL (Pathology)

Over siddha system is based on the fundamental principles, they,

Vali

Azhal

Iyyam

These three humors are nothing but a combination of pancha bhoodhas is

Vali – Air and space

Azhal – Fire.

Iyyam – Earth & water

The three humors have different functions. The right proportion of each is responsible for maintaining good health. When these three humours are disturbed, it manifests as a pathologic state of the body. Physiology, pathology, treatment or management comes under to play its role under this topic.

"kfDk FiwaDk Neha nraAkE}Nyhh
tsKjyh vz za %dW"

-Fws

There are ten varieties of vali, they are

PRANAN: (Uyirkaal):

It is mainly responsible for respiration and it is necessary for proper digestion and utilization of the food materials.

ABANAN (Keelnokkum Kaal):

It carries the digested nutrients to the concerned areas. It's main function is excretion of urine, faecal matter, semen and ovum.

VIYANAN (Paravukaal):

From the skin it spreads through the nerves and blood vessels to various organs and helps in flexion and extension. It is responsible for the sensation of the skin.

UDHANAN (Melnokumkaal):

It's derangement causes symptoms of upper gastro intestinal tract disease, problems in speech etc.

SAMANAN (Nadukkal):

It's derangement causes impaired memory lack of coherent thinking.

NAAGAN:

It is responsible for intelligence. It's functions are blinking of eyelids and horripilation of hair.

KOORMAN:

Derangement of koorman will result an impairment of vision and lacrimal secretion.

KIRUGARAN:

It's derangement causes changes in salaivary secretion, nasal secretion and hunger.

DEVADHATHAN:

Hazziness is attributed for this vayu.

DHANANJAYAN:

This Vayu is the causative factor for the foul smell after death and bursts open.

AZHAL (5 Varieties):

ANALAGAM:

It's derangement produces indigestion, acidity, heart burn.

RANJAGAM :

It's derangement will cause anemia.

SAADHAKAM:

It's derangement causes stupor & destroys thinking power. It activates ego to carryout one's desire.

AALOSAGAM:

It's derangement causes defective vision.

PRASAGAM:

It's derangement may cause pigmentation disorders.

IYYAM (5 Varieties):

AVALAMBAGAM:

It's derangement causes diseases of the respiratory system and indirectly the derangement of the other iyyam.

KILEDAGAM:

If deranged produces indigestion and loss of appetite.

PODHAGAM:

Derangement causes anorexia.

THARPAGAM:

If deranged produces loss of memory & derange the senses.

SANDIGAM:

If deranged causes drying of synovial fluid & impairs the mobility of joints.

EZHU UDAL KATTUGAL

SAARAM:

It is responsible for the growth & development. It keeps the individual in good spirit and it nourishes the blood.

SENNEER

Blood imparts colour to the body & nourishes the muscle responsible for the ability, intellect of the individual.

OON

It gives shape to the body according to the requirement for the physical activity.

KOZHUPPU

It helps in lubricating the different organs.

ENBU

Supports the system & responsible for the posture and movements of the body.

MOOLAI

It fills the body cavity and nourishes them.

SUKKILAM (OR) SURONITHAM

It is responsible for the reproduction. In siddha system of medicine the history regarding the patients native place (thinai) of disease (paruvakalam) have specific significance.

THINAI

The geographical distribution of the land is classified into five regions each has its own character. Which influences the inhabitant's physical, mental, economic and cultural activities. In each region some elements are endemic based on clinical features.

S.No	Land	Ailments
1.	Kurinchi (Mountain and its adjacent areas)	Iyya Noigal
2.	Mullai (Forest and its adjacent areas)	Azhal Noigal
3.	Marutham (Fertile field and its adjacent areas)	No Diseases
4.	Neithal (Sea and its adjacent areas)	Vali Noigal
5.	Paalai (Desert and its adjacent areas)	Vali, Azhal, Iyya Noigal

As kirani is caused primarily by the development of Azhal Vali & Vali. Its occurrence is expected to be more in Mullai Nilam.

PARUVAKALAM

The three-Uyir thathus deranges in accordance with the paruva kalam.

S.No	Land		Ailments
1.	Kaar Kalam	Avani, Puratasi (Aug, Sep, Oct)	Azhal, Vali
2.	Koothir Kalam	Aippasi, Karthigai (Oct, Nov, Dec)	Azhal
3.	Munpani Kalam	Margazhi, Thai (Dec, Jan, Feb)	All thathus remain in equilibrium
4.	Pinpani Kalam	Masi, Panguni (Feb, Mar, April)	Iyyam
5.	Illavenil Kalam	Chithirai, Vaigasi (Apr, May, Jun)	Iyyam
6.	Muduvenil Kalam	Aani, Aadi (Jun, July, Aug)	Vali

As the disease **"Kirani"** occurs due to the derangement of Azhal Vali & Vali thathus, the incidence is expected more during kaarkalam & muduvenil kalam.

ENVAGAI THERVUGAL

In siddha system of medicine, the diagnosis is also made by the eight methods called envagai thervugal.

"ehbg ghrk ehewk nkho to
Kyk %jjuk it kUjJtuhAjk
(Njiuah)

(rjj kUjJt Neha ehly Kjdhly julL gffk-253)

SPARISAM (Touch)

By sparisam the temperature of the skin (thatpam-cold or veppam-heat) Smoothness, Roughness, sweat, dryness, hard patches, swelling, abnormal growth of organs & tenderness can be felt.

In kirani noi there is tenderness all over the abdomen especially on the to right iliac fossa (tyJ tQrdgFj)

Also patients temperature is increased all over the body.

NAA (Tongue)

By the examination of the tongue its colour, size, shape, coating, moisture, movements, ulcers, fissures, crusts and condition of teeth & gums can be examined.

The tongue is dry in **"Iya Kirni"**

"ehr|Na ehNthL twlr| fhDk
EaeJNk ghisahaf FlyNghy tOk"
(A+f| itjj|a r|ejhkz| gffk - 175)

NIRAM (Colour)

Colour of the skin all over the body, changes of the skin due to local infection should be observed. In kirani niram of udal depends upon the body constitution, pallor of the body is observed in **"Antharavayu Kirani".**

"t|iuffNt tyhggffk ,r|TkhFk
Nkd|nayyhk ntSgGkhFk t|ffYz|hk"
(A+f| itjj|a r|ejhkz| gffk - 178)

MOZHI (Voice)

By examing mozhi, pitch or voice, character, hoarseness, slurred speech various disorders of speech such as dysarthria can be noted. In kirani there is low pitch voice due to grambling pain in the abdomen.

VIZHI (Eye)

Colour, character, vision (both field of vision & colour of vision) lacrimation should be observed. In kirani there may be shunken eyes due to diarrhoea. **(In sankara kirani)**.

"rUffkhaf fzfsuzLk Rowr ahFQ
rqfuf fuhznadNw rhwwyhNk"

(Af itjja rejhkz gffk - 183)

MALAM (Stools)

Its nature colour, Froth, Erugal, Elegal, Quantity and presence of blood or pus can be noted.

To Find out Mukkutram by Malam:

1. Black colour, Hard stool- Vaatha Noi.
2. Less amount, White or Red or Yellow colour stool-Pitha Noi.
3. Loose stools, White colour-Kabha Noi.
4. Mixed colour-Mukkutra Noi.

In kirani there may be stools with blood and mucus. Sometimes stool colour is black **(In vali kirani)**.

"fhthFq flbaha tawww fhDq
fhwWNk kfffoAq fWgG khFk"

(Af itjja rejhkz gffk - 174)

Alternative constipation & frothy stool, bulky amount of stool, also present.

SIRUNEER (Urine)

"jhff rhjjhfshNdhh jqfsy NjheJ Nehad
thffkh ehbjddhy mwtJ kaff nkdNw
cww ehg ghlir MaeNj czhjiu ,jwF Neuha
kwnwhUtj E}yyiy kUjJtf fiy tyyNyhhfNf"

(ghly - 348 page no 113)

By correlating the pulse reading & proper urine analysis, physician should confirm the diagnosis. General features of urine explained in siddha texts are,

"tej ehf fhnail kdk eiu vQrnydW
lejra xsit aiuFJ KiwNa"

(rjjkUjJt Neha ehly Neha Kjydhly gffk -297 Part –I)

Niram	colour of urine
Edai	Specific gravity of urine
Manam	odour of urine
Nurai	frothy nature of urine
Enjal	the quantity of urine & sediments of urine

NIRAM (Colour)

Nira Thogai (Types)

"gjk nrkikia fUik ntz iknad
Nwhijq nfhOikia nahjJU eNu"

(rjj kUjJthqf RUffk ehb Page –334)

Yellow
Red
Green
Black
White

In **"Kirani"** the quantity of urine is low & colour of urine is slightly red. There is burning sensation also present.

NURAI (Froth)

"gejnkag girasfggLk gUtj
jejhg Gjkha mey %jjujjy
rkgejggLk jjEiug GsNy"
(rjj kUjJthqf RUffk -Page -346)

Urine may be frothy in nature if it is reduced vali, Azhal, Iyyam are said to be deranged.

NAATRAM (Smell)

"Xjkzj Njhlt Nthj nkhj jwqFk
rjdq fkka Njf fSfNf"
(rjj kUjJthqf RUffk -Page -345)

ENGAL(Deposits – Crystalluria)

NEIKURI

Collect the urine in a kidney tray and keep it in the sunlight, non windy condition. Examine the urine by dropping a drop of gingelly oil gently, with a rod. If the oil spreads,

1. Like snake, it indicates valineer
2. A ring indicates Azhal neer
3. Floats like a pearl indicates, Iyya neer
4. Sinks in the urine indicates mukkutra neer.

"muntd ezbd Nj thjk
MoNghw gutd m/Nj gjjk
Kjnjhj J ewfd nkhotnjd fgNk"
(rjj kUjjthqf RUffk)

In kirani oil spreading like a ring indicates **"Azhalneer"** or snake indicates **"Valineer"**

NAADI

"fhKfdbia thojj ifjdy ehbghhffy
ngUtuyqFyjjy gbjjb eLNt njhllhy
xUtuNyhby thjKah eLtuyw gjjk
jUtuy %dwNyhby NrjJk ehbjhNd"

(mfjjah ehb> Neha ehly NehaKjdhly julL -1 Page -123)

Naadi diagnosis is the significance of ancient siddha system. The naadi indicates alteration among the three kuttram which is the foremost aetiology for disease. The three naadis are felt one inch proximal to the wrist on the radial artery by means of palpation with tip of index, middle, ring finger corresponding to Vali, Azhal, Iyyam respectively.

The ratio is 1 mathirai for vatham (felt by index finger)
½ mathirai for pitham (felt by middle finger)
¼ mathirai for kabham (felt by ring finger)

So the normal ratio between vatham, pitham & kabham is 1: ½ : ¼ respectively. Derangement of this ratio indicates a specific pathological manifestation.

MUKKUTRA VERUPADUKAL

1. Fasting
2. Indigestion
3. Flatulence
4. Water brash

Azhal kuttram is increased & affect the **"Uyirkalgal"** So the increased level of Azhal kuttram and mel nokku kaal, Keelzh nokkukal, nadukkal. It will cause the Kirani Noi.

WHEN MELNOKKU KAAL INCREASED

Plunching, vomiting, hiccough, thirst, excessive salivation.

WHEN KEELZH NOKKUKAL INCREASED

Distension of the abdomen, pain in the lower abdomen diarrhoea associated with mucus and blood.

WHEN PARAVUKKAL INCREASED (Viyanan)

General emaciation, swelling of extremities, pallor of the body.

WHEN NADUKKAAL INCREASED

Indigestion, chronic diarrhoea occur. In this condition, increased level of Azhal kutram will affect the other two kuttrams that is vatha & kabha.

NAADI NADAI IN KIRANI

“rwgghd gjjjjy thjehb
NrhYW jhJell Kjugil
ciwgghfr nrhahik FdkQ #iy
cww Ruq fuhztaw wiurry kejk
miwgghd Xqfhu gwehf Nfhit
Mahrq fuffnkhL kaff %hrir
KiwfhaT tltff %ythA
Kulhd NehagyTk %LFkgzNa”

((rjf ehb) Neha ehly Neha Kjdhly - Part –I Page – 383)

Aggravation of Azhal vali produces symptoms of kirani.

“thjnkDk ehbaJ Njhdww
rjkejnkhL taWnghUky julr thA
rjKWq fuhz kNfhjuk euhik
jfothA #iyty fLgGj jiu
ejkUq fUkFdk kzl thjk
eiyAkehf fhrruqfs jej Nkfk
Ngjfkh %jjugz %y Nuhfk
Ngr ntF gzfSNk nghUsjhNk”

(rjf ehb)(Page – 384)

Aggravation of vali naadi produces symptoms of kirani.

“thj kFejhYk tdgjje jdDlNd
thjk tiutDk teJWNk – NghjTly
fuhz atwiwj jhjJf nfLfFk
fuhz tif vz zfNfs”

(ifnaOjJ guj)Neha ehly Neha Kjdhly - Part –I Page – 384

During this disease, weakness of the vali azhal naadi.

According to Paripoorana Naadi

“fuhz ajrhu nkdwhy
thjgjjk jsheJ fhZk”

(ghGhz ehb)

SAATHIYAM & ASAATHIYAM (Prognosis)

SAATHIYAM

"nrajll rhjjajijr nrggf Nfsha
ruhd thjnkhL gjjf fuhz
cajll c\z thAf fuhz NahL
cahej tejuthA %yffuhz
nrajll nfhggkhq fuhz NahL
nfb nthlLf fuhz----------

----------rhjjakhk"

(Af itjja rejhkz) Page -173

ASAATHIYAM

"mrhjjakhq fuhz tif awaf Nfsha
marNylLkq Fdknkhl njhejffuhz
jhjjahkhQ rqfuf fuhz NahL

----------mrhjjahejhNd"

(Af itjja rejhkz) Page -173

",jnjhif jdd yay NrjJkk
ejJ njhej etYqFdkk
rqfu dhdifr rhUq fuhz
mqfud nrhddit rhjjakhFk
kwwit NaOk kfotJ rhjjakhFk
gwwsahaejhy gdD}d kiwNa"

(ifnaOjJ guj)

According to Yugi munivar and kai ezhithu pirathi vali, Ahzal, Azhal kaal, mel kudarkaal, Keelzh kudarkall, sool, ottu kirani are curable, whereas iyya, mukkutra, kunma, sangiraga is incurable.

MARUTHUVAM (Line of Treatment)

“cwwhdsTk gzasTq fhyKk
fwwhd fUjr nray”

(Fws)

The treatment should be based on the age & built of the patient the severity of the disease and the period of the ailment. In siddha system of medicine, treatment is not only for removal of disease, but for the prevention and improving the body condition after removal of diseases. This is said as

Kaapu (Prevention)
Neekam (Treatment)
Niraivu (Restoration of well being)

KAAPU (Prevention)

Proper diet, good habits, environmental adaptation.

DIET

PATHIYAM

“khWghbyyhj czb kWeJz z
CWghbyiy cahfF”

(Fws)

“khNd taW fothfF thioffrr yjjffha
fhNd jhA %hfFUt fhilTLkG fTjhh
jhNd ahF KaYyhw wffFyjJf fUthlh
kNd tUkgj jdgNuy tNzAaiu aoejNu

(rfrrhuej jgk Page -318)

thiofrry> mjjffha> ChfFUt> fhil> cLkG> fTjhh> Kayfw> FsjJ fUthL> foqfhd kd rhgglTk.

APATHIYAM

“fhuhkzf fiu fhlLggwqfaiy
Nguhk ngUkgawwd Nghiyfs - ruh
ufjjgUq fjjhffhaahaioNa kdfs
gifjjjf NgjjUk ghh”

(rfrrhuej jgk Page -318)

fhuhkzffiu> fhlL gwqfaiy> ngUkgaW> mfjj fiu> ngha fjjhffha> kdfs rhgg l Ngj mjfkhFk.

NEEKAM

The aim of the treatment is,

1. To bring the affected thathus to normal level.
2. To treat the diseases according to its symptoms by internal medicines.

INTERNAL MEDICINES

The main object of treatment is to bring down the deranged mukkutrams to natural equilibrium by giving purgatives.

BUT IN KIRANI

Already the patients have diarrhoea,

So need not necessary to give purgative.

The internal medicines used to treat kirani are,

1. Mangottai Paruppu Chooranam –1gm, after food, twice a day.
2. Jathikaai Karkam – 5 gm with Curd, after food, twice a day.

NIRAIVU (Restoration)

1. Reassurance of disease recovery should be given to all patients.
2. Regarding prevention of kirani stated in sanitary handling of foods & avoidance of raw fruits & vegetables in areas where the protozoa is endemic and proper sewage disposal and should live according to Nilam & Kalam in food & personal habits.

MODERN ASPECT

MODERN ASPECT OF AMOEBIASIS

DIGESTIVE SYSTEM

The molecules that are used to build the tissues of the body are derived form the food we eat. The function of the digestive system is to take in food, break down the complex molecules that make up the food into smaller molecules, and absorb the small molecules for use in the body. With water, electrolytes, and other nutrients such as vitamins & minerals.

The digestive system consists of the digestive tract, a tube extending from the mouth to the anus, plus associated organs which secrete fluids into the digestive track.

It contains,

1. Oral cavity
2. Pharynx
3. Oesophagus
4. stomach
5. Small intestine
6. Liver
7. Large intestine
8. Pancreas
9. Salivary glands

STOMACH

The stomach is j-shaped dilated portion of the alimentary tract situated in the epigastric, umblical and left hypochondric regions of the abdominal cavity.

FUNCTIONS OF THE STOMACH: Secretion-Gastric Juice-2 to 3ltr per day

1. Temporary storage allowing time for the digestive enzymes, pepsins to act.
2. Chemical digestion – pepsins convert proteins to poly peptides.
3. Mechanical digestion the three smooth muscle layer enables the stomach to act as chura, gastric juice is added & the contents are liquefied to chyme.
4. Limited absorption of water, alcohol & some lipid –soluble drugs.
5. Non specific defense against microbes is provided by HCL in gastric juice & vomiting may be a response to local irritation, eg: ingestion of noxious chemicals or microbes, mechanical irritation.
6. Dissolving out of iron from food.
7. Production of intrinsic factor needed for adoptions of Vit-B_{12} in the terminal ileum.
8. Outward movements of the contents of the pyloric end of the stomach.

SMALL INTESTINE

The small intestine is continuous with the stomach at the pyloric sphincters and leads into the large intestine over 5 meters long and lies in the abdominal cavity surrounded by large intestine. In the small intestine the chemical digestion of food is completed and most of the absorption of nutrient materials takes places.

It is divided into 3 parts,

1. The duodenum is about 25 cm long & curves around the head of the pancreas. As its midpoint there is an opening common to the

pancreatic duct & the common bile duct, guarded by the hepato pancreatic sphincter (of oddi).

2. The jejunum is the middle part of the small intestine and is about 2 meters long.
3. The ileum, or terminal part, is about 3 meters long and ends at the ileocaecal valve which controls the flow of material from the ileum to the caecum, the first part of the large intestine and prevents regurgitation.

SECRETIONS

1. Intestinal juice 3lt / day, pH 7.8 to 8.
2. Pancreatic juice.
3. Bile.

LARGE INTESTINE (Blind caecum)

It consists of the caecum, colon, rectum & anal canal the large intestine is about 1.5 meters long, beginning at the caecum in the right iliac fossa and terminating at rectum & anal canal deep in the pelvis.

CAECUM

It is proximal end of the large intestine & is where large & small intestines meet. The caecum is a sac that extends inferiorly about 6 cm past the ileo caecum junction. Attached to the caecum is a tube 9 cm long called the appendix.

COLON

The colon is about 1.5 to 1.8 meters long & consists of 4 parts. The ascending colon, the transverse colon, the descending colon and the sigmoid colon.

- The ascending colon extends superiorly form the caecum to the right colic flexure, near the liver, where it turns to the left.
- The transverse colon extends from the right colic flexure to the left colic flexure near the spleen, where the colon turns inferiorly.
- Descending colon extends from the left colic flexure to the pelvis, where it becomes the sigmoid colon.
- Sigmoid colon forms an s-shaped tube that extends into the pelvis & ends at the rectum.

RECTUM

It is straight muscular tube that begins at the termination of the sigmoid colon & ends at the anal canal.

ANAL CANAL

The last 2-3 cm of the digestive system is the anal canal. It begins at the inferior end of the rectum & ends at the anus.

FUNCTIONS OF THE LARGE INTESTINE

Rectum & Anal Canal

Absorption

The contents of the ileum which pass through the ileo caecal valve into the caecum are fluid, even though some water has been absorbed in the small

intestines. In large intestine absorption of water continues until the familiar semisolid consistency of faeces, is achieved. Mineral salts, vitamins and some drugs are also absorbed.

MICROBIAL ACTIVITY

Large numbers of microbes in the colon which synthesise Vit –K & folic acid they include escherichia coli, enterobacter aerogens, streptococcus faecalis, clostridium perfringens (welchii) E.coli causes cystitis. Gases in the bowel consist of some of the contents of air, mainly nitrogen, swallowed with food and drink and as a feature of some anxiety states. Hydrogen, CO_2, methane are produced by bacterial fermentation.

MASS MOVEMENT

A strong peristalsis sweep along the transverse colon forcing its contents into the descending & sigmoid colon.

DEFAECATION

Defaecation involves involuntary contraction of the muscle of the rectum & relaxation of the internal anal sphincter. Contraction of the abdominal muscles and lowering of the diaphragm increase the intra abdominal pressure (Valsalva's manoeuvre) and so assist the process of defaecation.

CONSTITUENTS OF FAECES

It contains a semisolid brown mass. The brown colour is due to the presence of stercobilinogen. Fibre(indigestible cellular plant & animal material).

- Dead & live microbes.

- Epithelial cells from the walls of the tract.
- Fatty acids.
- Mucus secreted by the epithelial lining of the large intestine.

Mucus helps to lubricate the faeces and an adequate amount of roughage in the diet ensures that the contents of the colon are sufficiently bulky to stimulate defecation.

AMOEBIASIS

Amoebiasis is caused by Entamoeba histolytica, named for its lytic Action on tissues. It is the most important & commonest intestinal infection of man. This condition is particularly more common in tropical & subtropical areas with poor sanitation.

It is most commonly asymptomatic, but symptoms ranging from mild diarrhoea to dysentery may occur.

The term amoebiasis is usually restricted to infection with E.H. amoebae are common in the mouth & gut and numerous in soil & water. Of the seven species of amoeba found in the gut, only two, E.h. & dientamoeba fragilis cause disease and even they are often harmless commensales. The amoeba in soil & water rarely cause disease, but species of Naegleria and acan thamoeba can cause menigo encephalitis.

It is a leading parasitic cause of death after malaria and schistosmoiasis.

AMOEBIASIS

Sub Phylum	:	Sarcomastigophora
Super Class	:	Sarcodina
Class	:	Rhizopodea

Order : Amoebida

The protozoal parasites belonging to this group, while in motion, throw out cytoplasms called pseudopodia which represent the organs of locomotion. The genera included in the order Amoebida are,

1. Genus Entamoeba : E.Histolytica, E.Coli & E.Gingivalis
2. Genus Endo Limase : E.Nana
3. Genus dienta moeba : D.Fragilis
4. Genus Iodamoeba : I.Blltschlii

IN ENTAMOEBA

The nuclear membrane is lined by chromatin granules and the compact karyosome is either centrally or eccentrically placed.

1. PATHOGENIC

Intestinal Amoeba : E.Histolytica.

2. NON – PATHOGENIC

1. Mouth Amoeba, E.Gingivalis.
2. Intestinal Amoebae, E.Coli, E.Nana, I. biits chlii &, D.Fragilis.

GEOGRAPHICAL DISTRIBUTION

World wide more common in the tropics and subtropics than in the temperate zone.

HABITAT

Trophozoites of E.histolytica live in the mucus & sub mucous layers of the large intestine of man. Also the liver, spleen, testis, gall bladder, bladder & skin.

MORPHOLOGY

4 stages

1. Trophozoite (or) vegetative
2. Precystic
3. Cystic
4. Meta cystic

METHODS OF REPRODUCTION

Excystation

Encystation

Multiplication

CULTURE

Cultural forms are identical with those found in man, but with of course no ingestions & encystment may occur in culture, this being an indication of retention of virulence in culture by the parasite under experiment. Multinucleate cysts are only occasionally found in culture. Horse or human serum, preferably the former are the best media starches & bacteria may be added.

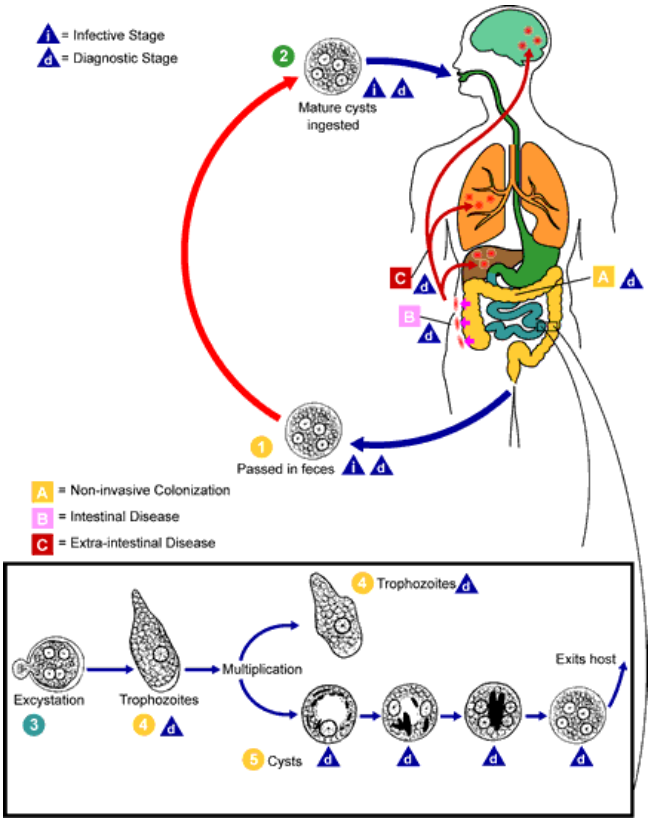
LIFE CYCLE OF E.H

The cyst is the infective agent, being ingested and passed unharmed to the lower part of the small intestine where the cyst wall becomes permeable through the action of intestinal secretions and there is excystations of a multinucleate amoeba, whose nuclei divide producing eight small metacytic.

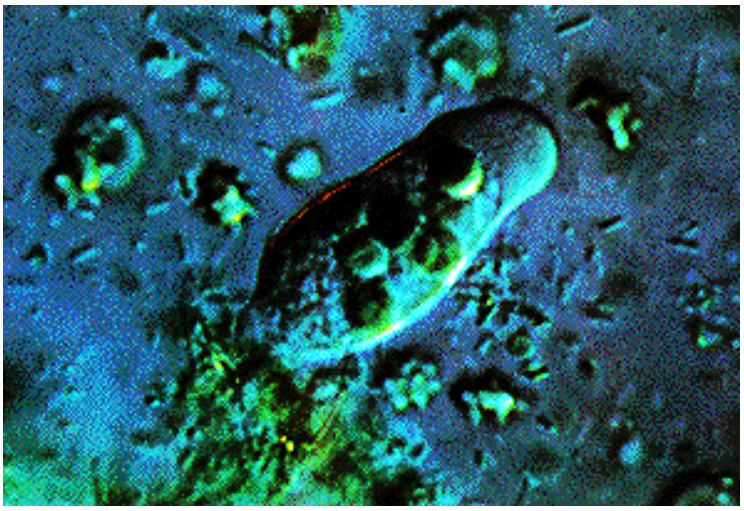
Torphozoites which penetrate the mucosa of the large intestine and enter the tissues in due course generally, but some may be extruded back into the lumen where they round up, precyst and encyst. Cysts are passed in the faeces and in due course are swallowed again by another individual and the cycle is thus completed. Excystations does not seem ever to occur in the same lost in which encystment took place cysts may continue to develop into quadrinucleate forms outside the body in favourable conditions. Division is by simple binary fission of the nucleus in the trophozoite and binary fission of the nucleus in the cyst followed by binary fission of the resultant nuclei till four are eventually produced.

Division of the nucleus is probably mitotic. The trophozoite divides into two individuals after the nucleus had divided, but in the cyst it is only occasionally found in culture.

LIFE CYCLE OF ENTAMOEBA HISTOLYTICA



E.H CYST IN THE STOOL



RESERVIORS OF INFECTIONS

Natural infection of E.histolytica is seen only among men & monkeys. Hence man is the commonest source of infection.

MODES OF INFECTION

DIRECT SPREAD

More common in the USA, occurs more frequently in areas where sanitation is poor (eg. Migrant labor camps & Indian reservations in the USA) fruits & vegetables may be contaminated when grown in soil fertilized by human faeces, washed in polluted water or prepared by an asymptomatic cyst passer. Water borne outbreaks associated with faulty plumbing have been described. Amoebiasis is sporadic. The infection rate in the USA is <1%. The carrier rate may exceed 50% where sanitation is poor.

- Cysts are resistant to chlorination & hyper chlorination of water is necessary to destroy them.
- A high carbohydrate diet, high iron intake, malnutrition, Immuno deficiency & pregnancy all make infection with E.h more likely.
- Food is easily contaminated by directly fingers, flies or cockroaches. Water can be contaminated by sewage.
- In Chicago in 1933, 1409 cases of amoebic dysentery occurred in two hotels with defective plumbing.
- More commonly seen in male homosexuals.
- Foods that are handled a lot during preparation.
- Pregnant women, people on steroids are susceptible to severe amoebiastis.

EPIDERMIOLOGY:

Infection is global approximately 10% of the world's populations have E.h in the colo rectum. It occurs 0.1 -20% of those infected with most cases in the tropics. Gay communities have asymptomatic E.h prevalence of up to 25%.

The parasite E.h infects approximately 500 million persons in developing countries, such as India, Mexico & Columbia resulting in approximately 40 million cases of dysentery & liver abscess.

In Canada & the United States, 1-5% of the populations have E.h in the stool. But in any one year less then 0.001% of the population develop amoebic colitis.

PATHOLOGY

There may be genetic susceptibility to invasive disease, as revealed by different HLA-DR types in amoebiasis patients compared with controls. Given a pathogenic strain & a susceptible host, 4 process follow during invasion.

1. The amoebae adhere to colonic epithelial mucins of several candidate proteins, one characterized amoebic adherence lectin is a 260 kda galactosamine.
2. The amoebae disrupt the epithelium PZ (pathogenic zymodemes) entemoeba secretes proteinases in vitro, which may dissolve epithelial barriers by degrading fibronectin, laminin, type I collagen.
3. The trophozites lyse epithelial cells & the responding host inflammatory cells. Direct contact between the parasite & host epithelial cell intitiates the secretion of a pore – forming protein (PFP) termed **"amoeba pore"** a 28 Kda protein which creates a 2nm hole in

the host cell membrane. This ion channel collapses the transmenbrane electric potential, water enters the cell which then swells & bursts. The host cell can then be phogocytosed. In vitro, & presumably. In vivo, amoebae can also kill host polymorphs, lymphocytes & macro phages.

4. The parasite resists host defences during deeper tissue invasion & in distant organs such as liver. The nature of host resistance is unclear. Specific anti-trophozite antibody is formed following invasion, but has no protective role. That cell mediated immunity is important is surmised from the fact that pregnant woman & patients on steroids are more likely to suffer severe invasive amobiasis.

INCUBATION PERIOD

4-5 days, (or) 10-90 days (robbins patho) but amoeba appears in the stool from 1-44 days after ingestion.

CLINICAL FEATURES

Abdominal discomfort, flatulence, intermittent diarrhoea, with constipation, presence of mucus in the stools, dyspepsia, mild fever, mild depression. Anemia, tenderness over the right iliac fossa.

PATHOGENIC LESIONS

1. PRIMARY OR INTESTINAL

Large intestine

2. SECONDARY OR METASTATIC LESION

(a) Liver (b) Lungs (c) Brain

INTESTINAL LESIONS

The trophozites libarated after excystation enter through the crypts of lieberkuhn & penetrate directly through the columnar epithelium of the mucus membrane by their amoeboid activity & by also dissolving the intestinal epithelial cells with a proteolytic ferment they secrete. Then they reach the submucous coat & multiply and destroy the tissues in their vicinity and utilize the cytolysed material as their food. The in vasion of the tissues by this parasite brings necrosis & the formation of abcess which leads to ulcer.

DISTRIBUTION OF ULCER

Large gut, ileo caecal region, sigmoido rectal region.

AMOEBIC ULCER HAS FOLLOWING PECULIARITIES

Size - Varying from a pin's head to 1 inch (or) more diameter.

Shape – Round or Oval, transverse in large coalescing ulcers.

Margin – Flask shaped ulcer (Ragged & undermined)

Base - Muscular coat filled up by necrotic material yellowish or blackish slough.

- Rectal prolapse, intussception & colonic stricture amoebomas may develop in the caecum or other parts of the colon & these may be mistaken for neoplasms.

AMOEBIC LIVER ABCESS

The abcess may rupture into the abdominal cavity or through the diaphragm into the lung the patient expectorating a brown **"anchovy" "sauce"** material containing many amoebae.

C.F OF AMOEBIC LIVER ABCESS

1. Located in the posterio-superior surface of right lobe of the liver.
2. Onset is insidious.
3. Pain & tenderness in the right hypochondrium.
4. Fever – low remittent temperature.
5. Jaundice.
6. Emaciated.
7. Lower border of liver is palpable.

1. RIGHT SIDED LIVER ABCESS MAY RUPTURE

a) Granuloma cuties – skin

b) Into the lung –haemoptysis anchovy –sauce pus.

c) Into right pleural cavity –empyema thoracis.

d) Below the diaphragm - subphrenic abcess.

e) Into the peritoneal cavity-peritonitis.

2. LEFT SIDED LIVER ABCESS MAY RUPTURE INTO

a) Stomach –haematemesis with anchovy sauce pus.

b) Pericardial cavity – pericarditis.

c) Left pleural cavity –empyema thoracis.

3. A LIVER ABCESS SITUATED ON THE INFERIOR SURFACE MAY RUPTURE INTO

a) Bowel – diarrhoea & discharge of pus in the stool.

b) Peritoneal cavity – fatal peritonitis

4. A LIVER ABCESS ON THE POSTERIOR SURFACE MAY RUPTURE INTO

Inferior vena cava ⟶ fatal.

METASTATIC LESIONS IN OTHER ORGANS

1. Pulmonary – a) Primary
   b) Secondary
2. Cerebral Amoebiasis
3. Cutaneous Amoebiasis
4. Splenic abcess

AMOEBOMA

It is the inflammatory thickening of the wall of large bowel resembling carcinoma of the colon. Microscopically the lesion consists of inflammatory granulation tissue, fibrosis & clusters of trophozites at the margin of necrotic with viable tissue.

LABORATORY DIAGNOSIS OF AMOEBIASIS

Diagnosis of intestinal Amoebiasis:

1. Symptomatic Group
2. Asymptomatic Group

1. EXAMINATION OF STOOL

a) Naked eye or macroscopic appearance:

An offensive dark brown. Semifluid stool. Acid in reaction. Admixed with blood, mucus and much faecal matter is representative of case of amoebic dysentry.

b) General Microscopical Charactor:

(i) The character of the cellular exudates (ii) The presence of charcot – leyden crystals. The cellular exudates is scanty and consists of only the nuclear masses (pyknotic bodies) of a few pus cells, macrophages & epithelial cells. The RBC are clumped and are reddish-yellow or yellowish-green in colour.

Charcot-Leyden Crystals:

In saline preparation they appear a diamond-shaped or whetstone-shaped crystals, clear and retractile. This sizes vary from 5-50 μ

c) Demonstration of E. histolytica

Microsocopically fresh stool the amoebic trophozoites can easily be recognised by their characteristic movement and presence of ingested red blood cells.

2. EXAMINATION OF BLOOD

Shows moderate leucocytosis.

3. SEROLOGICAL TEST

In early cases it is always negative because although there is tissue invasion it has not existed long enough to produce detectable antibody.

B) A SYMPTOMATIC GROUP: CYST PASSERS (OR) CARRIERS

1. Examination of Stool:

a) Microscopic Examination of

(i) A natural stool for cysts

(ii) A smear (for/cysts) prepared by concentration method or

(iii) A purged stool obtained after a saline cathartic (Motile trophozoites & cysts)

(iv) The material collected by the use of sigmoidoscope (trophozoites) specimen obtained through the sigmoidoscope yields a positive result only when there are visible lesions in the sigmoid rectal area.

b) CULTURAL EXAMINATION:

Stools negative microscopically when cultured shown the presence of parasites.

c) ANIMAL INNOCULATION:

To test the virulence of the strain isolated.

2. BLOOD PICTURE:

It is no way characteristic.

3. SEROLOGICAL TEST

In "asymptomatic carriers" the amoebae, present in the stool, are in the commensal phase with very little or no invasion of the tissues. These cases are sero-negative. But those cases where tissue invasion without any symptom has excisted long enough to stimulate the antibody formation. The serological test may be positive.

DIAGNOSIS OF HEPATIC AMOEBIASIS

1. Diagnostic Aspiration.
2. Liver Biopsy.
3. Examination of stool.
4. Examination of blood.
5. Serological Test.

a. Complement fixation test.
b. Precipitin test.
c. Immobilization test.
d. Test of goldman.
e. Indirect haemaggulutination test.
f. Passive cutaneous anaphylaxis.

6. Intra dermal test.
7. Radiological Examination.

EXAMINATION OF STOOL:

No.	Wet Smear	E.h	E.Coli
1.	Movement	Progressive	Non-Progressive
2.	Ingested RBC	Present	Nil
3.	Stained preparation		
	Nuclear Chromatin	Central	Eccentric
4.	Number of nuclei	1 (or) 4	1, 2 upto 8
5.	Chromidial hairs	Short & thick	Filamentous

SEROLOGICAL TEST:

1. Indirect fluorescent antibody test (IFA)
2. Indirect haemagglutination test (IHA)
3. Double diffusion test & ELISA

High IHA titers strongly suggest invasive amoebiasis or amoebic liver abscess.

IMMUNO DIAGNOSIS OF AMOEBIASIS

	Investigation	**Amoebiasis**
1.	Blood Test	Present
2.	Specific:	
	Antibody to E.h	Present
3.	Skin Test	
	Intra dermal	Present

MICROSCOPIC EXAMINATION:

They present either a **"mouse – eaten"** appearance owing to the action of the digestive enzyme on parts of the cytoplasm or pyknotic bodies from the nuclear fragments.

MACROSCOPIC:

S.No		**Amoebic dysentery**	**Bacillary dysentery**
1.	Number	6-8 motions a day	Over to motions a day
2.	Amount	Relatively copious	Small
3.	Odour	Offensive	Odourless
4.	Colour	Book red	Bright red
5.	Nature	Blood & mucus mixed with stool	Blood & mucus no faeces
6.	Reaction	Acid	Alkaline
7.	Consistency	Not adherent to the container	Adherent to the bottom of the container

MACROSCOPIC:

		Amoebic dysentery	Bacillary dysentery
1.	R.B.C	Inclumps reddish – yellow in colour	Discrete (or) in rouleaux. Bright red in colour
2.	Puscells	Scanty	Numerous
3.	Macrophages	Very few	Large & numerous
4.	Eosinophils	Present	Scarce
5.	Pyknotic Bodies	Very common	Nil
6.	Ghost cells	Nil	Numerous
7.	Parasite	Trophozites of E.h	Nil
8.	Bacteria	May motile bacteria	Nil
9.	C.L. Crystals	Present	Nil

AMOEBIC ULCER:

		Amoebic dysentery	Bacillary dysentery
1.	Type of lesion	Necrotic	Suppurative
2.	Depth of ulcer	Deep	Shallow
3.	Edge of ulcer	Undermind	Sharp
4.	Intervening mucosa	Normal	Inflamed
5.	Organisms in lesions	E.h	Bacillus dysentriae
6.	Cytology of stools	Mononuclear	Polymorpho nuclear
7.	Liver abcess	Commen	Rare

PROPHYLAXIS:

1. Use of boiled drinking water.
2. Protection of food & drinks from contaminated by flies, cockroaches & rates.
3. Avoidance of use of raw vegetables & fruits.
4. Personal hygeine.

COMMUNITY PROPHYLAXIS:

1. Effective sanitary disposal & faeces.
2. Protection of water supplies from faecal pollution.
3. Avoidance of use of human excrement as fertilizer.
4. Detection & isolation of carriers.

MATERIALS AND METHODS

MATERIALS AND METHODS

The clinical study on

"Kirani noi" was carried out in post graduate department of **"Maruthuvam"** of Govt. siddha medical college and Arignar Anna hospital of Indian medicine, Chennai-106.

The **"Kirani Noi"** cases were selected by their clinical features of grambling pain in abdomen, nausea, vomiting, Tenderness, tenesmus pain, alternative constipation, fever, Borborygmus, offensive odour motion, multi colour stool, bulky amount of stool, Diarrhoea, plunching, water brash and by their microscopical examination of stool 40 selected patients for this clinical study were from both sexes of varying age groups. The parameters used were.

Proforma:

The case sheet proforma for "**Kirani Noi**" was prepared based on siddha methodology and modern aspects before treatment a detailed clinical history of present illness, family history and associated history, habits, menstrual history and associated history such as occupation, socio-economic status etc.

Investigations:

To establish the diagnosis and confirm the presence of E.h.cyst, all patients were screened by the following investigations.

This was carried out regularly before treatment and after treatment.

Motion Examination:

Motion test was done, E.h cyst was Isolated from other protozoas (or) parasites.

Urine Examination:

Urine routine was done, for Albumin, sugar, deposites.

Blood for Bio-chemical Examination:

The blood was tested for sugar, urea and cholesterol.

Selection of cases:

- In "**Kirani Noi**" cases with very short duration, who had E.h.cyst positive in motion test.
- In confirmed patients the given medical treatment were assessed on the symptomatic relief of pain as well as absence of E.h.cyst in the motion test.
- All the positive patients were advised to continue treatment till the motion test is absence of E.h.cyst.
- All the time of discharge the patients were strictly to attend out patient department for regular follow up till the absence of E.h.cyst in the motion test and follow diet restrictions personal hygiene, effective sanitary disposal of faeces.
- The trial drugs **"Jathikkai karkam"** and "**Mangottai paruppu chooranam**" was prepared as per the procedures given in original siddha literatures.
- Bio-chemical analysis of **"Jathikkai karkam"** and "**Mangottai paruppu chooranam**" was done in the department of Bio-chemistry, Govt. siddha medical college, Chennai -106
- Anti Microbial studies was carried out in, Priya Diagnostic Centre, Araokkonam.
- Pharmacological validation of trial drugs was done at **"Periyar College of Pharmaceutical Science for Girls- Trichy."**

DRUG AND DOSE SCHEDULE:

- **Trial medicine –I**
- Mangottai paruppu chooranam: 1 gm, B.D after food.
- Jathikkai karkam: 5 gm with curd, B.D. after food.

RESULTS AND OBSERVATION

RESULTS AND OBSERVATION

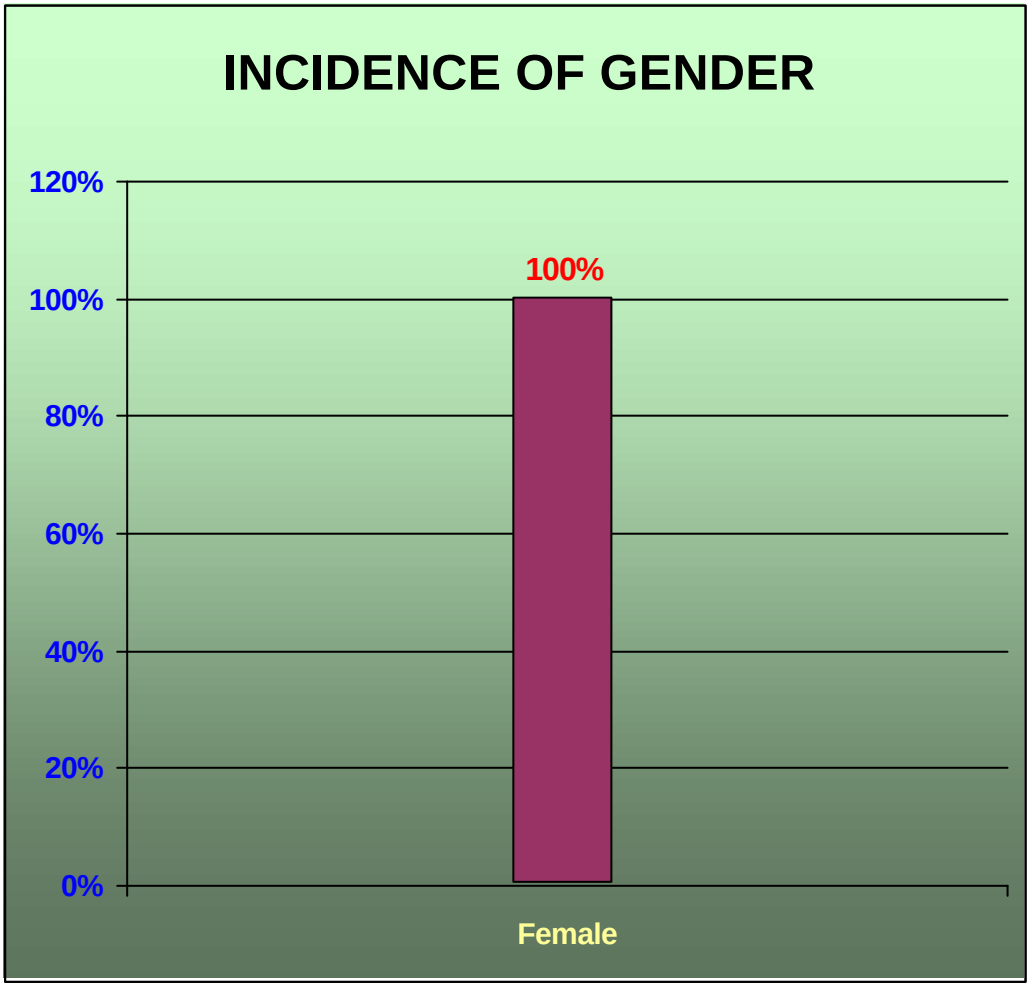
20 patients were treated in post graduate pothu maruthuvam department for the clinical study of “Kirani Noi”. The trial medicines were given to the patients and observation were made during the course of study with regards to the following features.

- Incidence of gender.
- Incidence of age.
- Socio – Economic status.
- Food habits.
- Other personal habits.
- Seasonal incidence (paruvakalam).
- Distribution of thinai.
- Clinical features.
- According to mukkutrangal.
- Ezhu udal kattukal.
- Enn vagai thervugal.
- Examination of urine
- Neerkuri.
- Nei kuri
- Motion test for entameoba histolytica.
- Routine blood examination (TC, DC, ESR, Blood urea and Hb).
- Aetiology.
- Results after treatment.

1. INCIDENCE OF GENDER:

Among 20 cases of this study 20 are females.

S. No.	Sex	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Male	-	-
2.	Female	20	100



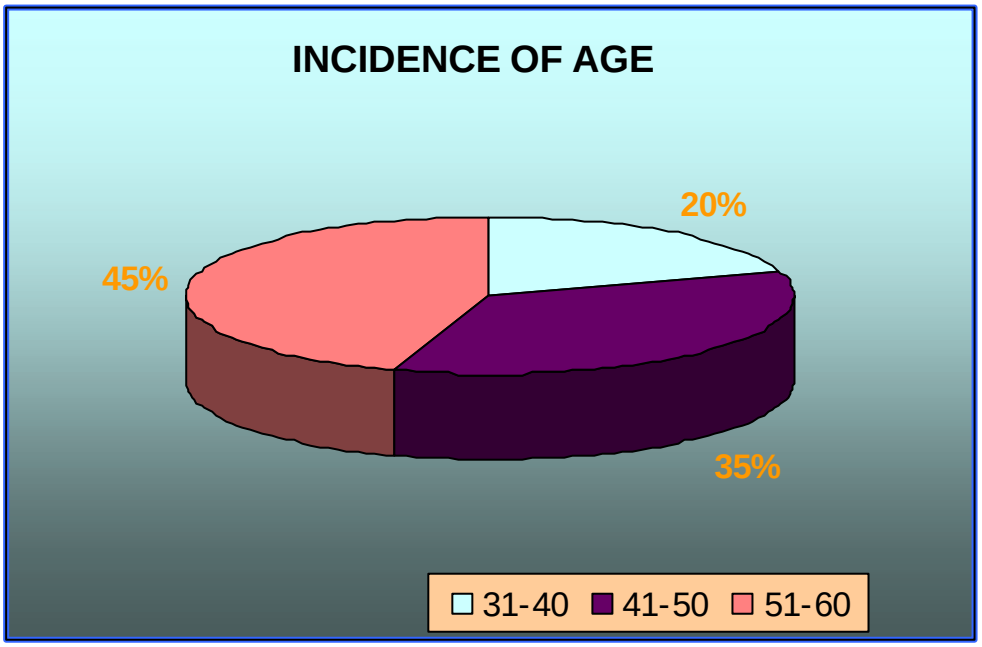
Inference:

Females are mostly affected than males. They are very susceptible to infection.

2. INCIDENCE OF AGE:

Among 20 cases of this study 20% age group of 31 to 40 years. 35% cases in the age group of 41 to 50 years. 45% cases in the age group of 51 to 60 years.

S.No	Age in Years	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	31-40	4	20
2.	41-50	7	35
3.	51-60	9	45



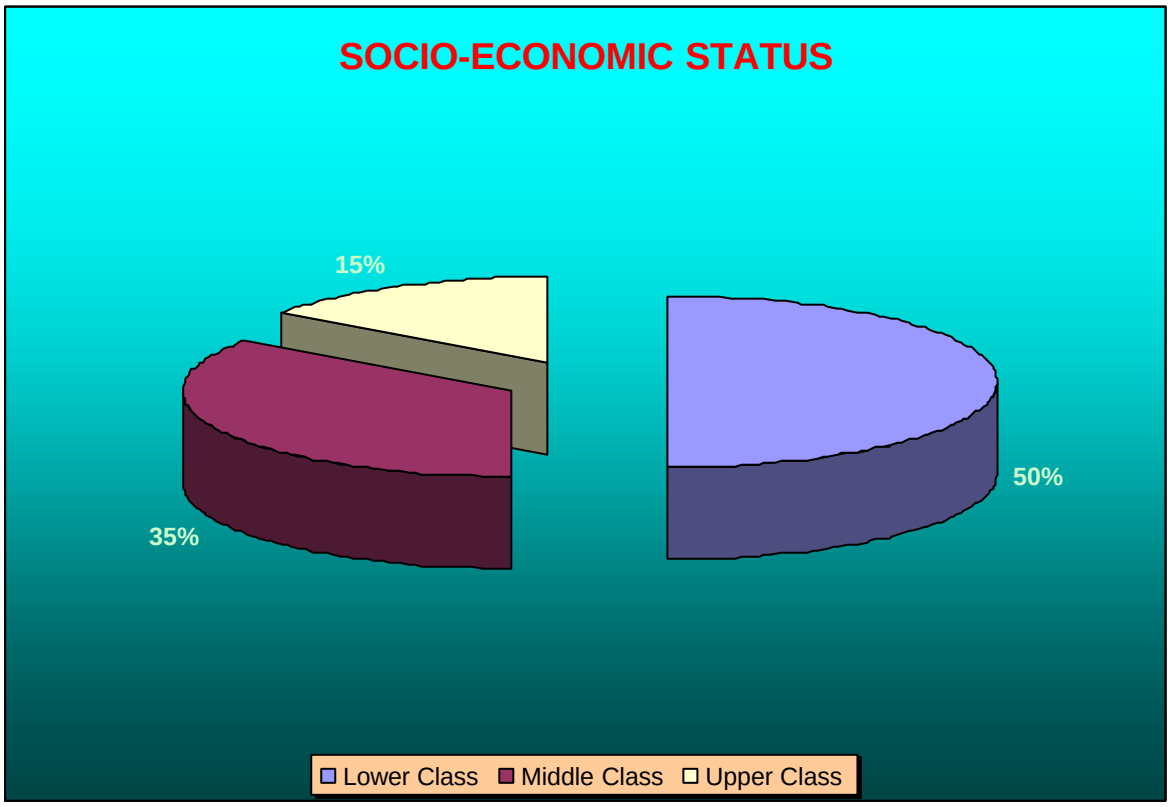
Inference:

In this study maximum incidence of the disease were in the age group between 51-60 years due to improper personal hygiene.

3. SOCIO-ECONOMIC STATUS:

For this study 50% of cases were observed in lower class, 35% of cases were in the middle class, 15% of cases in the upper class.

S.No	Age in Years	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Lower Class	10	50
2.	Middle Class	7	35
3.	Upper Class	3	15



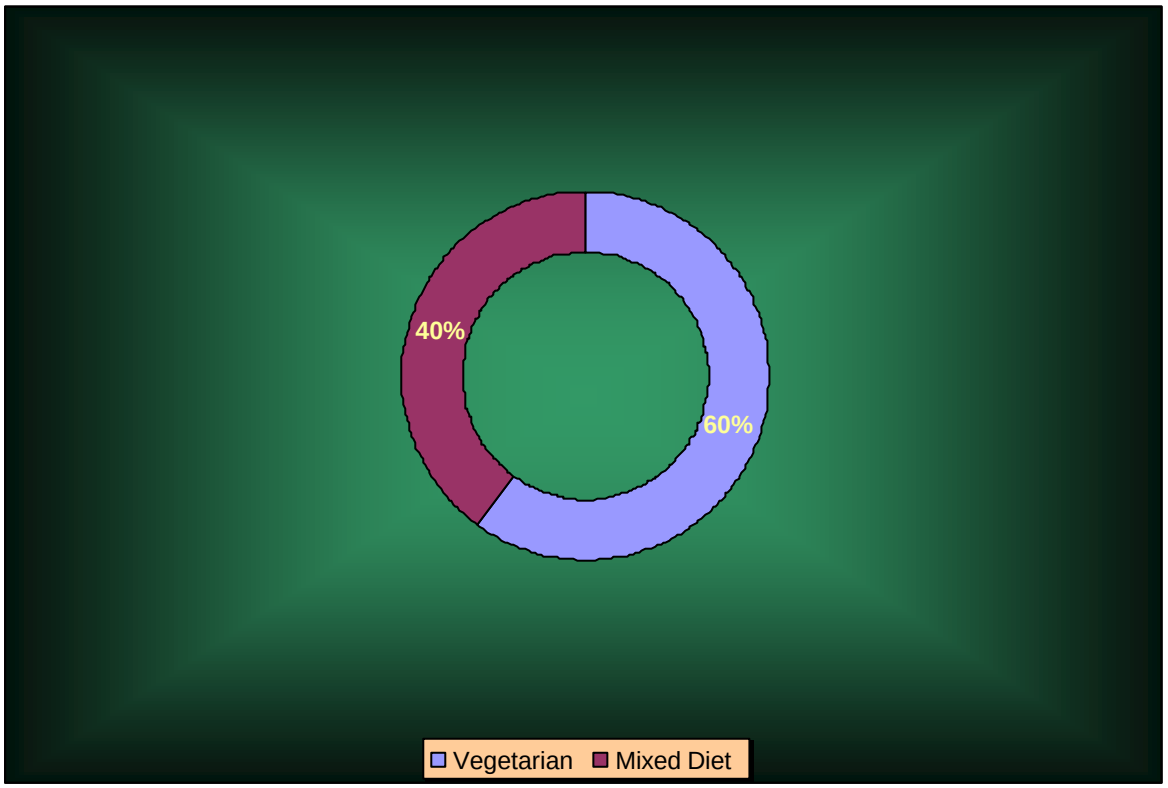
Inference:

In this study the maximum number of patients were in lower and middle class due to their life style and environmental factors.

4. FOOD HABITS:

Among 20 cases 60% cases were vegetarian, 40% of cases are mixed diet.

S.No	Food Habits	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Vegetarian	12	60
2.	Mixed Diet	8	40

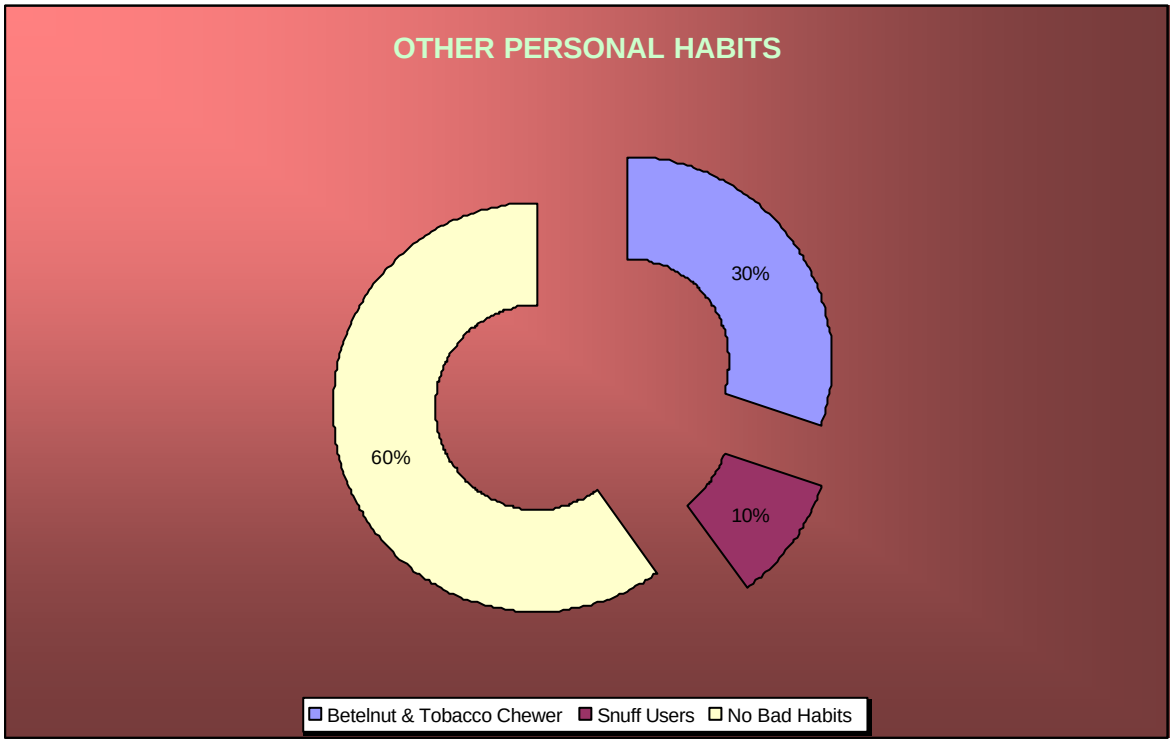


Inference:

In this study the maximum numbers of patients were in vegetarian diet. The disease exists due to use of raw vegetables and fruits.

5. OTHER PERSONAL HABITS:

S.No	Habits	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Smoker	-	-
2.	Alcoholic	-	-
3.	Smoker & Alcoholic	-	-
4.	Betelnut & Tobacco Chewer	6	30
5.	Snuff Users	2	10
6.	Pan Parag Users	-	-
7.	No Bad Habits	12	60



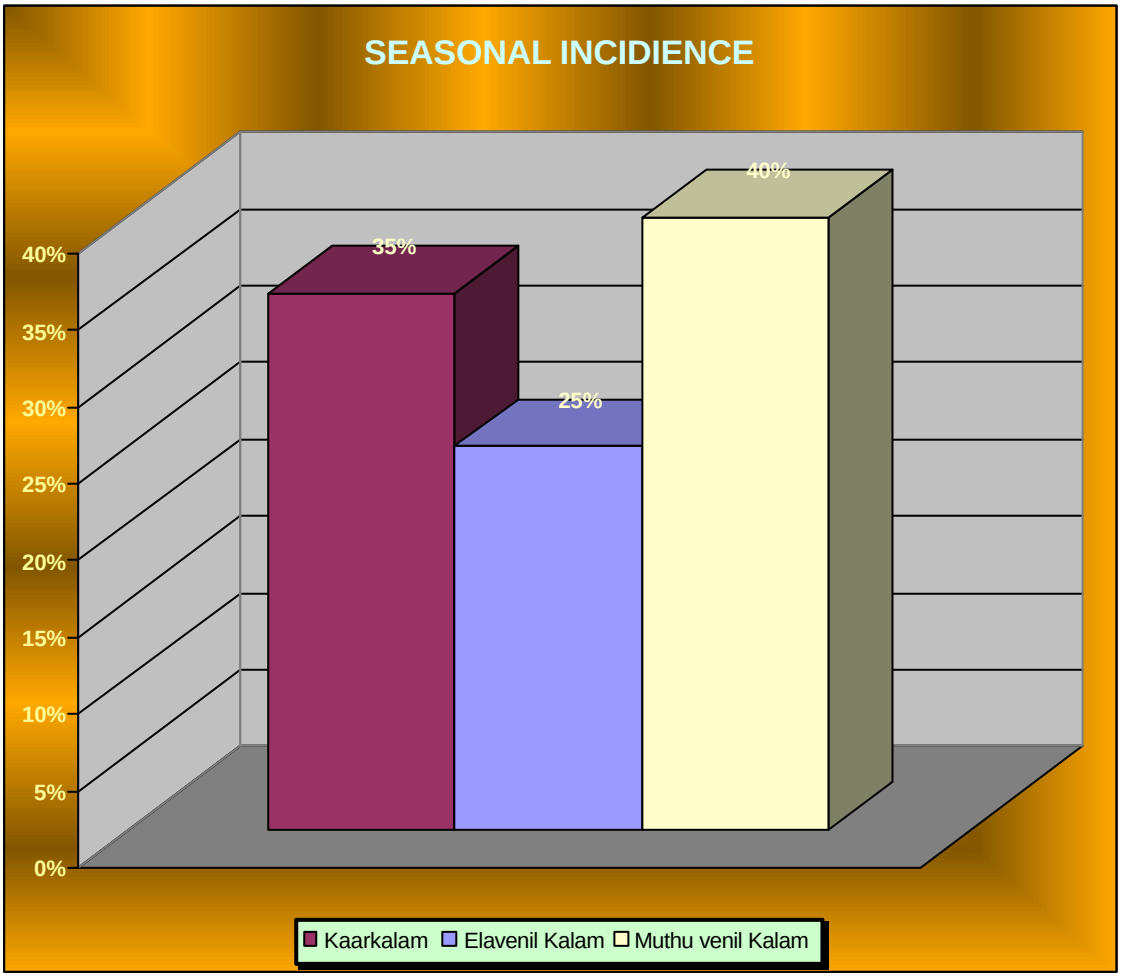
Inference:

Among 20 patients, 6 patients had habits like Betelnut & Tobacco Chewer, 2 patients are snuff users, but 12 patients did not have any such habits.

6. SEASONAL INCIDIENCE (Paruvakalam):

In this observation 40% patients were affected in muthuvenil kalam, 35% patients were affected in kaarkalam, 25% patients were affected in elevenil kalam.

S. No	Paruvakalam	Month	Inpatients	
			No. of Cases (20)	(%)
1.	Kaarkalam	Avani, Puratasi (Aug, Sep, Oct)	7	35
2.	Koothirkalam	Ayppasi, Karthigai (Oct, Nov, Dec)	-	-
3.	Munpani Kalam	Margazhi, Thai (Dec, Jan, Feb)	-	-
4.	Pin Pani Kalam	Massi, Panguni (Feb, Mar, April)	-	-
5.	Elavenil Kalam	Chitirai, Vaigasi (April, May, June)	5	25
6.	Muthu venil Kalam	Aani, Aadi (June, July, Aug)	8	40



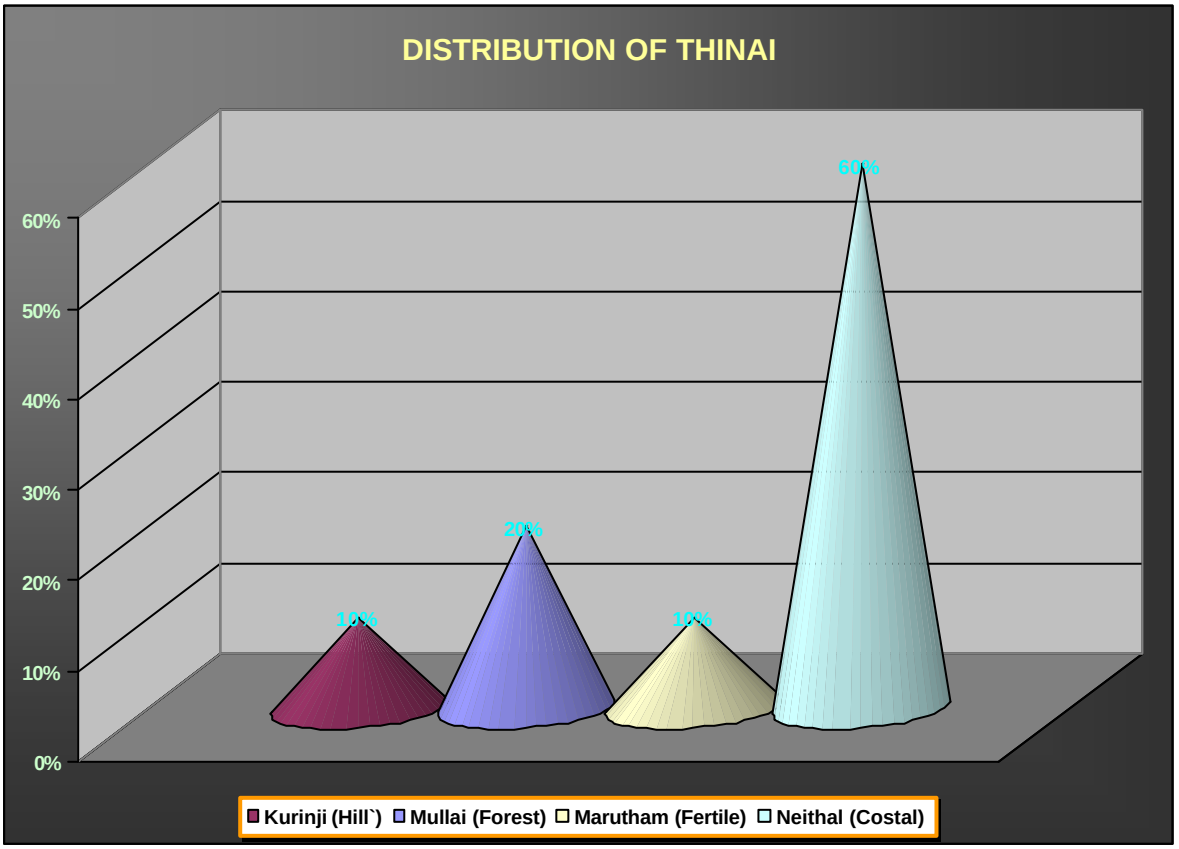
Inference:

During these months have average rainfall and peak incidence for contamination of water, food & drinks by flies, cockroaches and rates. During kaar & muthuvenil kalm, pitha, vaatha are provoked seasons.

7. DISTRIBUTION OF THINAI:

In this study among 20 patients 60% were neithal nilam (costal area) 20% were mullai (forest area), 10% were marutham nilam (fertile area), 10% were kurinji nialm (hill area).

S.No	Land	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Kurinji (Hill`)	2	10
2.	Mullai (Forest)	4	20
3.	Marutham (Fertile)	2	10
4.	Neithal (Costal)	12	60
5.	Paalai (Desert)	-	-

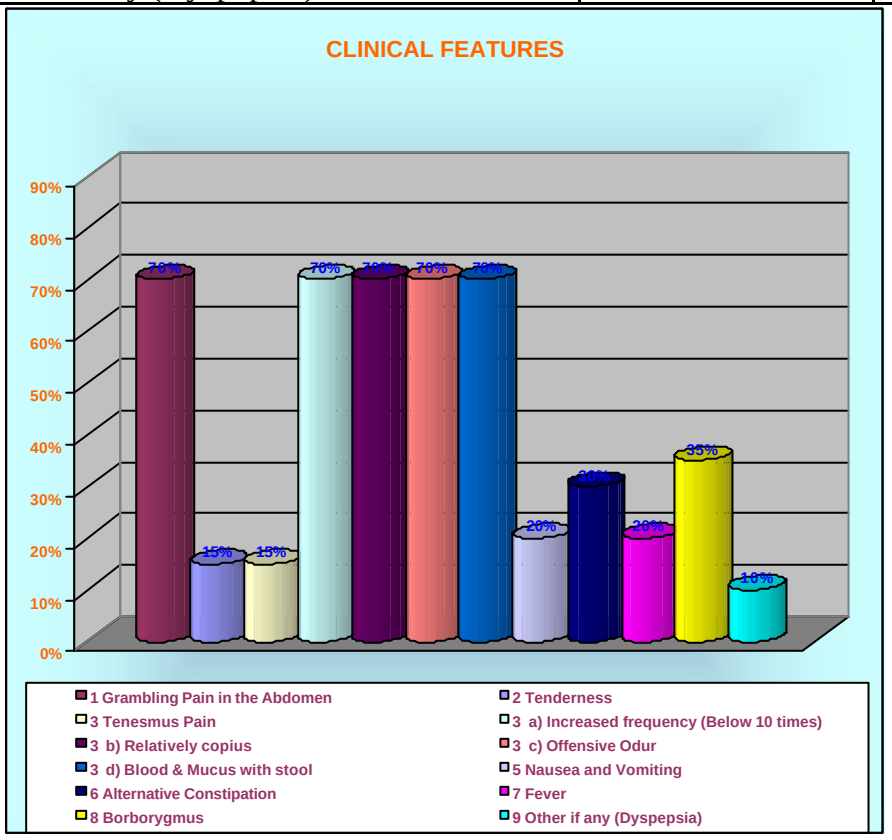


Inference:

In our siddha system “Kirani Noi is caused primarily by the development of Azhal Vali and vali. It’s occurrence is expected to be more in mullai and neithal nilam.

8 (a). CLINICAL FEATURES:

S.No	Clinical Features	Before Tt	
		No. of Cases (20)	%
1.	Grambling Pain in the Abdomen	14	70
2.	Tenderness	3	15
3.	Tenesmus Pain	3	15
4.	Nature of Motion a) Increased frequency (Below 10 times) b) Relatively copius c) Offensive Odur d) Blood & Mucus with stool	 14 14 14 14	 70 70 70 70
5.	Nausea and Vomiting	4	20
6.	Alternative Constipation	6	30
7.	Fever	4	20
8.	Borborygmus	7	35
9.	Other if any (Dyspepsia)	2	10

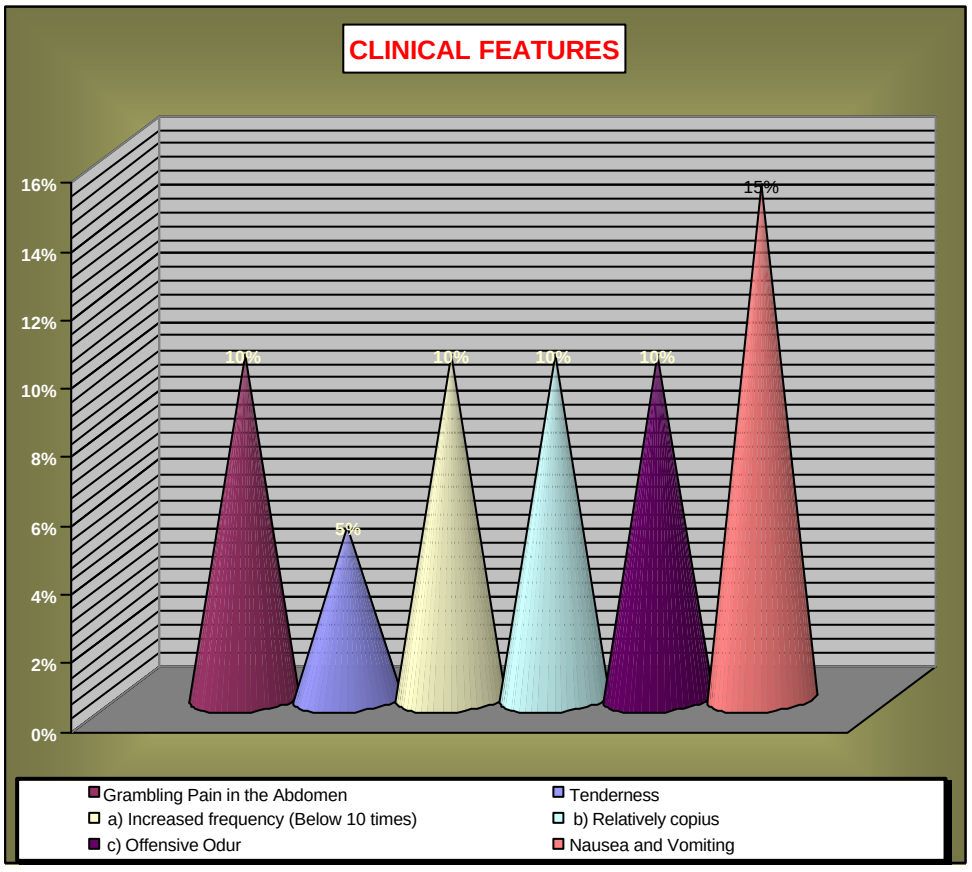


Inference:

In this observation before treatment all patients had pain and in the abdomen and 70% of the patients had diarrhoea, relatively copius, offensive odur, with blood and mucus as the presenting complaint and 35% of patients had borborygmus.

8 (b). CLINICAL FEATURES:

S.No	Clinical Features	After Tt	
		No. of Cases (20)	%
1.	Grambling Pain in the Abdomen	2	10
2.	Tenderness	1	5
3.	Tenesmus Pain	-	-
4.	Nature of Motion a) Increased frequency (Below 10 times) b) Relatively copius c) Offensive Odur d) Blood & Mucus with stool	 2 2 2 -	 10 10 10 -
5.	Nausea and Vomiting	3	15
6.	Alternative Constipation	-	-
7.	Fever	-	-
8.	Borborygmus	-	-
9.	Other if any (Dyspepsia)	-	-



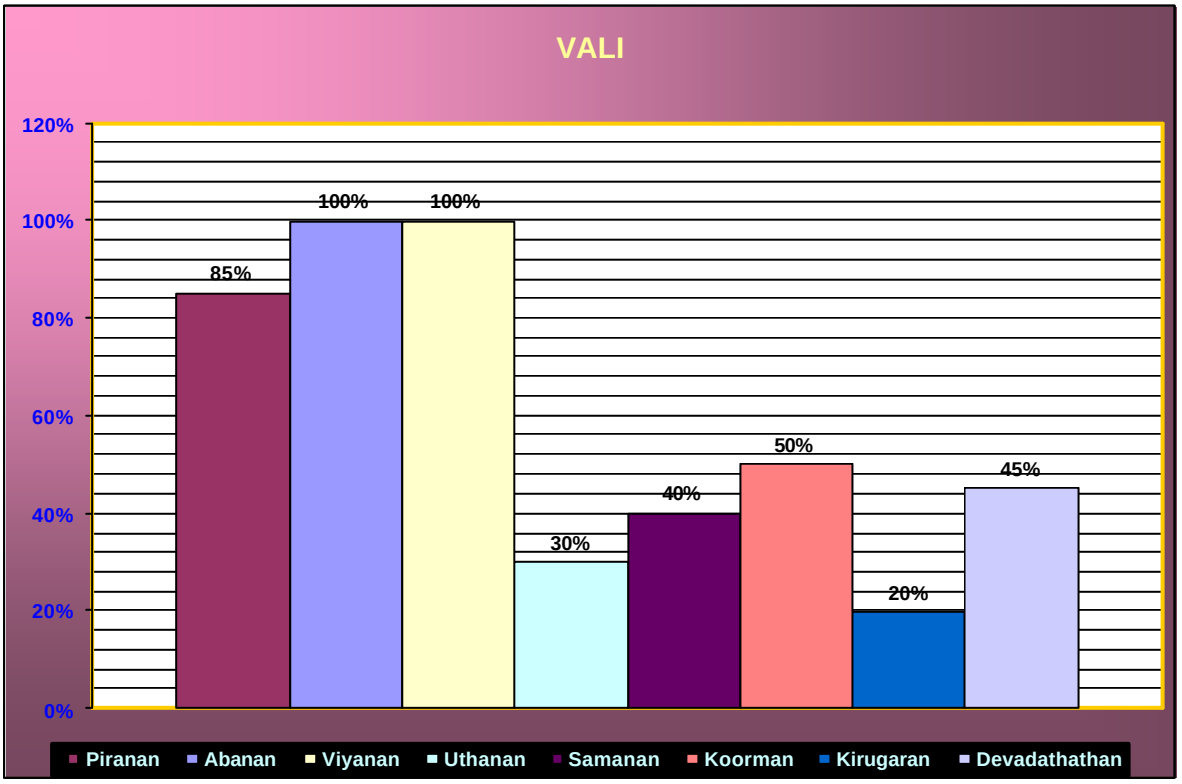
Inference:

After treatment only 10% of the patients had occasional mild pain, offensive odur, relativetly copi us, below 3 times motions a day, 15% of the patients had nausea and vomiting, 5% of patients had tenderness, after the absence of E.h.Cyst, patients were absolutely free from symptoms.

9. ACCORDING TO MUKKUTRANGAL - VALI:

According to this observation in vali kuttram, Abanan and Viyanan is affected 100% of cases, Piranan is affected in 85% of cases and Koorman is affected 50% of cases.

S.No	Types of Vali	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Piranan	17	85
2.	Abanan	20	100
3.	Viyanan	20	100
4.	Uthanan	6	30
5.	Samanan	8	40
6.	Naagan	-	-
7.	Koorman	10	50
8.	Kirugaran	4	20
9.	Devadathathan	9	45
10	Dhanajayan	-	-

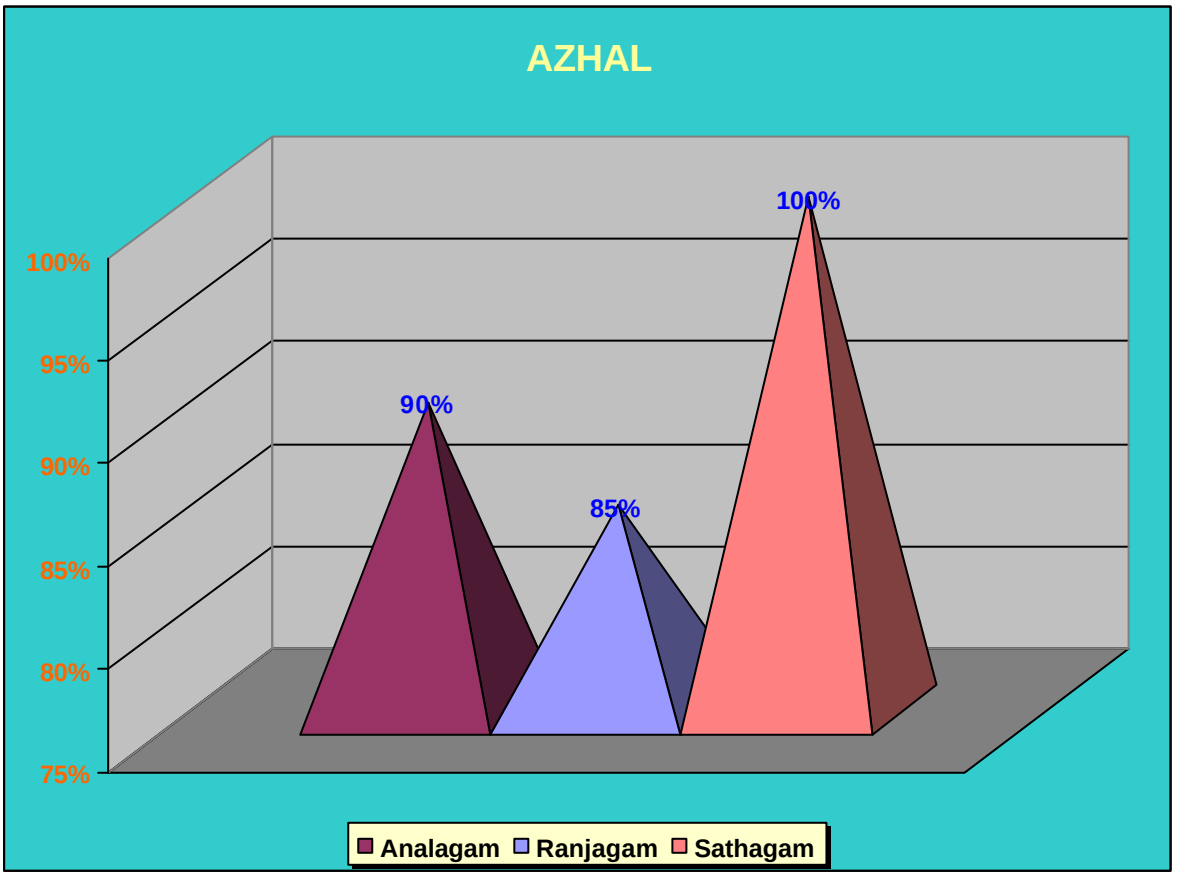


Inference:

Abanan and viyanan is affected 100% cases, because derangement of abanan causes diarrhoea, mucus with blood in the stool.

10. ACCORDING TO MUKKUTRANGAL - AZHAL:

S.No	Types of Azhal	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Analagam	18	90
2.	Ranjagam	17	85
3.	Sathagam	20	100
4.	Aalosagam	-	-
5.	Prasagam	-	-



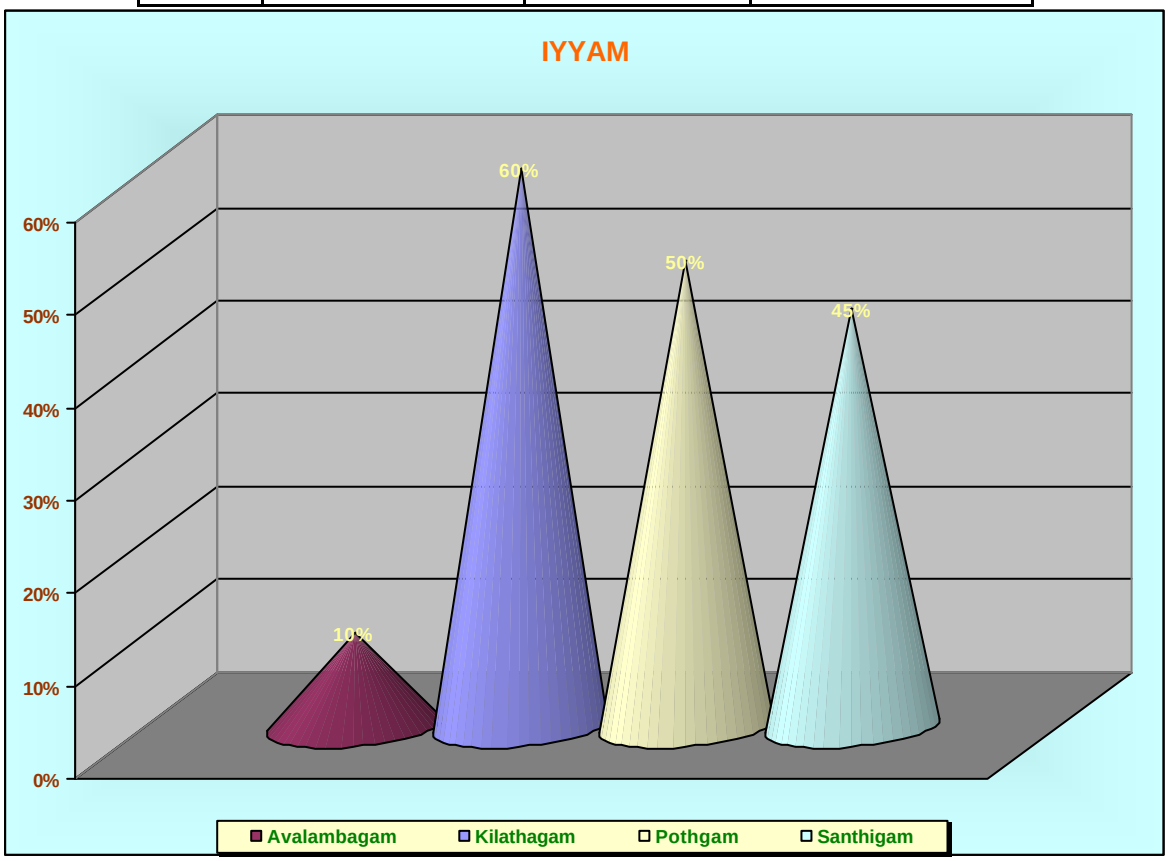
Inference:

Among 20 patients 100% of cases were affected by these symptoms like diarrhoea, grambling pain in the abdomen, nausea and vomiting, borborygmus, alternative constipation. So most of the patients affected in sathaga pitham.

11. ACCORDING TO MUKKUTRANGAL - IYYAM:

In this observation, avalambagam was affected in 10% of cases, kilathagam was affected in 60% of cases, pothagam was affected in 50% of cases, santhigam was affected in 45% of cases.

S.No	Types of Iyyam	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Avalambagam	2	10
2.	Kilathagam	12	60
3.	Pothgam	10	50
4.	Tharpagam	-	-
5.	Santhigam	9	45



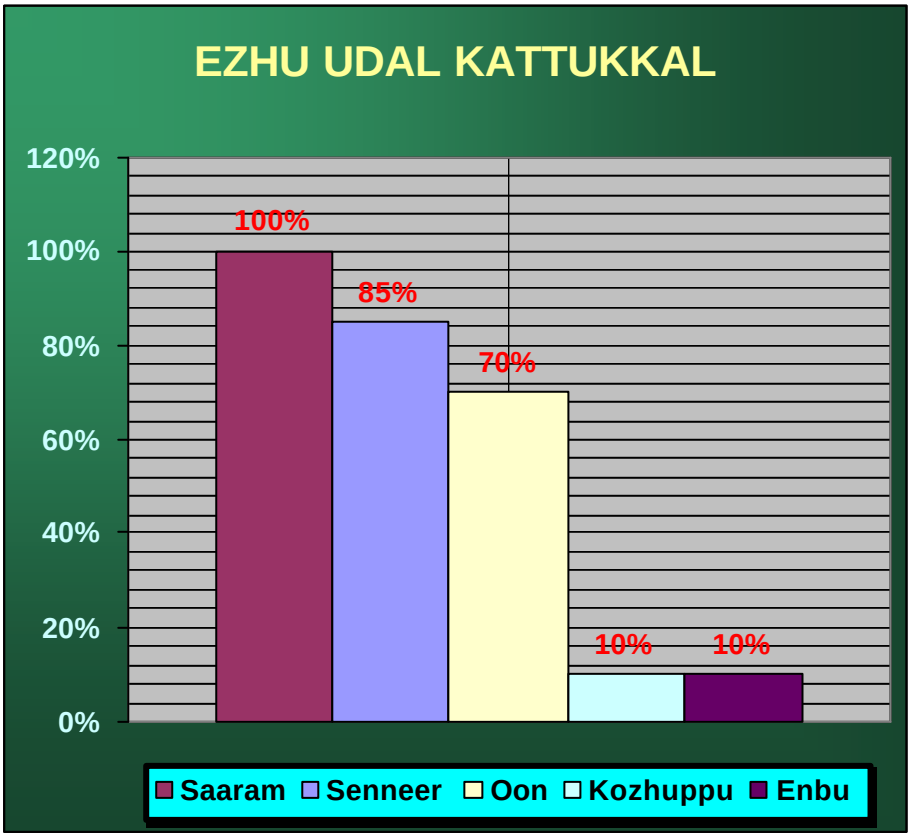
Inference:

Among 20 patients, most of them having, diarrhoea, dyspepsia, nausea, vomiting, borborygmus, so the avalambagam, kilethagam, pothagam, santhigam was mostly affected.

12. EZHU UDAL KATTUKKAL:

For this study among 20 patients, saram was deranged in all cases. Senner was deranged in 85% of cases, Oon was deranged in 70% of cases, Enbu and Kozhupu was deranged in 10% of cases.

S.No	Udal Kattukal	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Saaram	20	100
2.	Senneer	17	85
3.	Oon	14	70
4.	Kozhuppu	2	10
5.	Enbu	2	10
6.	Moolai	-	-
7.	Sukkilam / Suronitham	-	-



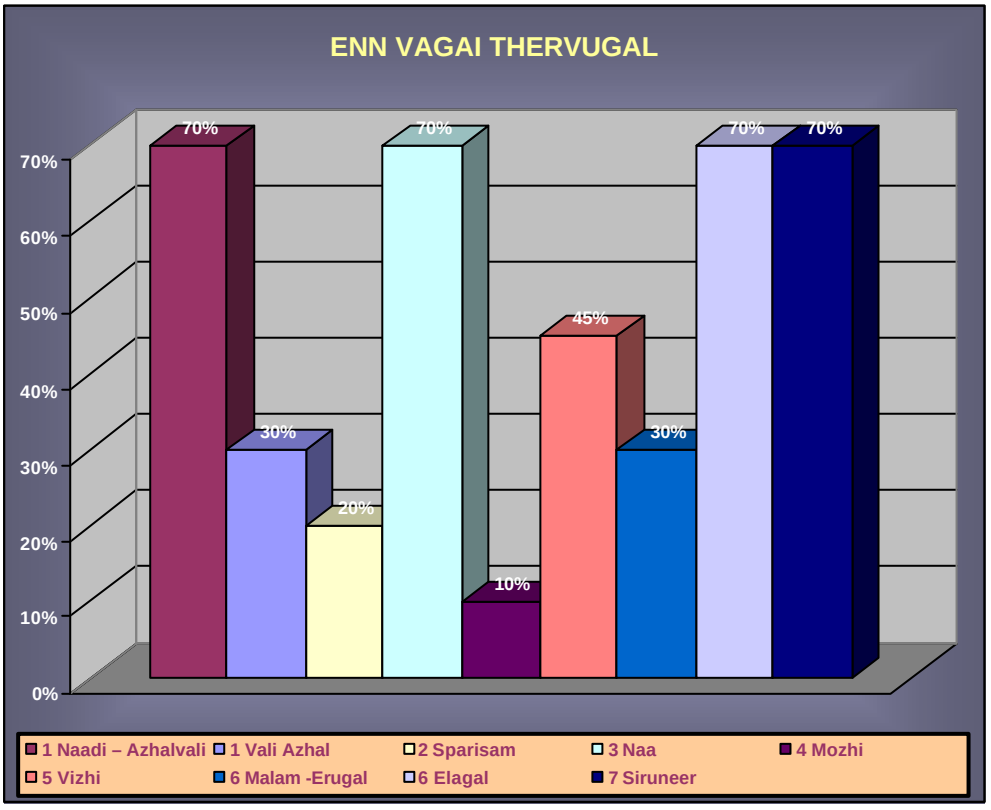
Inference:

Most of the patients are affected by saaram..

13. ENN VAGAI THERVUGAL:

In this observation among 20 cases, malam was affected in 100% (Erugal-30% & Elagal-70%) of cases, naadi was deranged azhalvali in 70% of cases, vali azhal in 30% of cases, siruneer and naa was affected in 70% of cases.

S.No	Envagai Thervugal	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Naadi – Azhalvali Vali Azhal	14 6	70 30
2.	Sparisam	4	20
3.	Naa	14	70
4.	Niram	-	-
5.	Mozhi	2	10
6.	Vizhi	9	45
7.	Malam -Erugal Elagal	6 14	30 70
8.	Siruneer	14	70



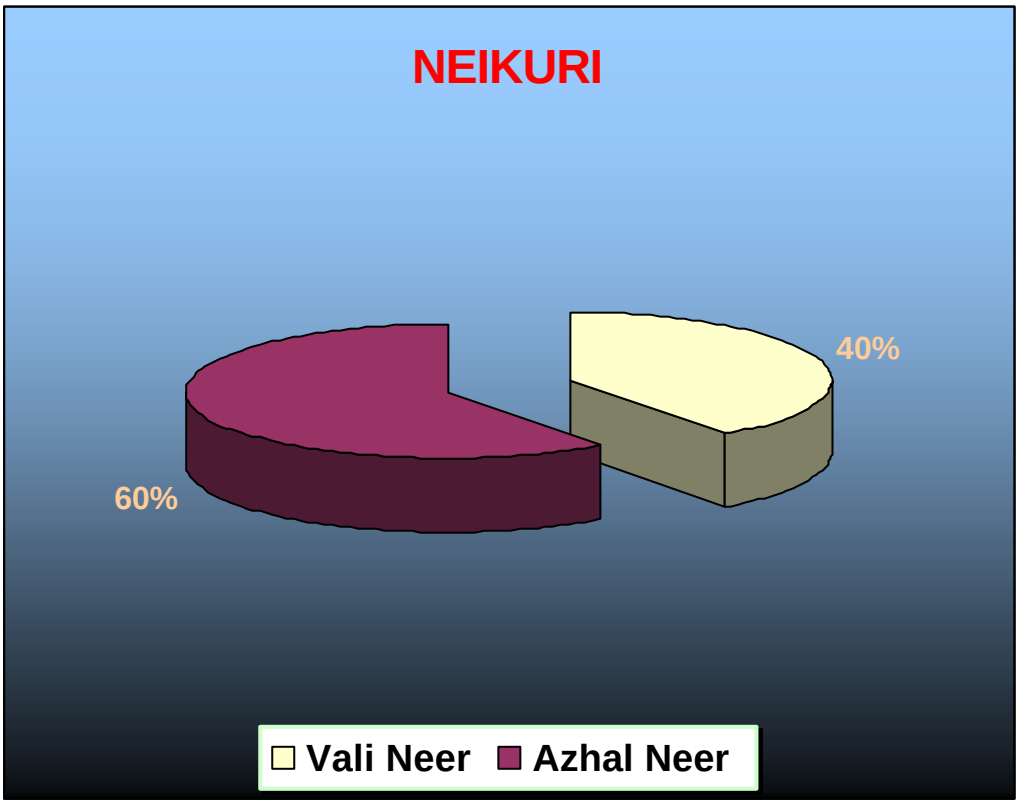
Inference:

With reference to sathaga naadi, most of the **"Kirani Noi"** patients have azhal vali and vali azhal kutram.

14. NEIKURI:

According to this clinical study among 20 cases, azhal neer in 60% of cases and vali neer in 40% of cases was observed.

S.No	Neikuri	Characters of Urine	Inpatients	
			No. of Cases (20)	Percentage (%)
1.	Vali Neer	Spreading like snake	8	40
2.	Azhal Neer	Spreading like Ring	12	60
3.	Iyya Neer	Spreading like Pearl	-	-



Inference:

In this study most of the Kirani Noi patients, have pitha and vatha neer.

14) DURATION OF ILLNESS:

S.No	Duration of Illness	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	During 2nd week	2	10
2.	During 3rd week	6	30
3.	During 4th week	12	60

15. HAEMOGLOBIN EXAMINATION:

S.No	Haemoglobin / mg %	Before Tt		After Tt	
		No. of Cases (20)	%	No. of Cases (20)	%
1.	Normal	3	15	19	95
2.	Below Normal	17	85	1	5

16) MOTION TEST FOR ENTAMOEBA HISTOLYTICA & OCCULT BLOOD:

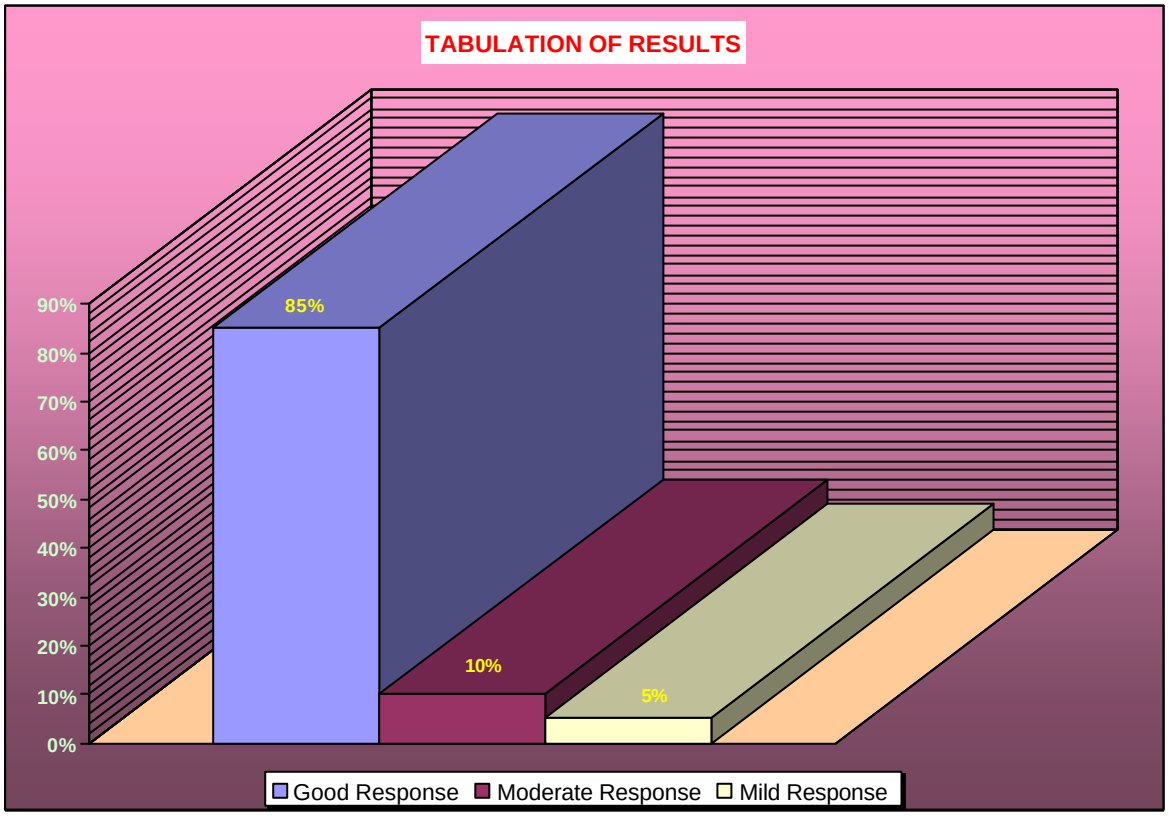
S.No	Organisms	Before Tt		After Tt	
		No. of Cases (20)	%	No. of Cases (20)	%
1.	Cyst of Entamoeba Histolytica	20	100	2	10
2.	Ova of Entamoeba Histolytica	-	-	-	-
3.	Occult Blood	-	-	-	-

17) AETIOLOGY:

S.No	Aetiology	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Poor Sanitation & Personal hygiene	17	85
2.	Family History	1	5
3.	Miscellaneous	2	10

18) TABULATION OF RESULTS:

S.No	Results	Inpatients	
		No. of Cases (20)	Percentage (%)
1.	Good Response	17	85
2.	Moderate Response	2	10
3.	Mild Response	1	5



Inference:

For this observation 85% of patients had good response for this medicine, 10% of patients had moderate response, 5% of patients had mild response.

LIST OF - IN PATIENTS

Sl. No.	I.P. No.	Name of the Patient	Age / Sex	Occupation	Date of Admission	Date of Discharge	No.days Rt	Result	Medicine
1.	269/8234	Raja Pushpam	52/F	Labour	02-05-07	14-05-07	13	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
2.	281/8864	Vijaya lakshmi	40/F	House Wife	04-05-07	17-05-07	14	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
3.	322/914	Sangarmmal	55/F	House Wife	09-05-07	20-05-07	12	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
4.	622/2735	Saroja	57/F	Labour	14-06-07	30-06-07	17	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
5.	620/2620	Gowselya	60/F	Labour	14-06-07	02-07-07	19	Not Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
6.	790/8517	Muniyammal	58/F	Labour	02-07-07	13-07-07	12	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
7.	773/8332	Mary	60/F	House Wife	02-07-07	11-07-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
8.	805/9237	Subulakshmi	47/F	Teacher	04-07-07	14-07-07	11	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
9.	863/1625	Kulanchi	35/F	Clerk	10-07-07	19-07-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
10.	872/1821	Alamelu	35/F	House Wife	11-07-07	20-07-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
11.	936/4491	Esther	51/F	Labour	18-07-07	30-07-07	13	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
12	977/5598	Parvathy	60/F	House Wife	21-07-07	29-07-07	9	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
13.	1014/7395	Ramalakshmi	40/F	Business Women	26-07-07	11-08-07	17	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
14.	1102/2057	Rajambal	48/F	Sweeper	09-08-07	20-08-07	12	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
15.	1120/2855	Krishna Veni	49/F	Hospital Servant	11-08-07	09-09-07	10	Not Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
16.	1152/4183	Sambaye	50/F	Sweeper	14-08-07	24-08-07	11	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
17.	1143/3953	Deiva mani	50/F	Labour	14-08-07	26-08-07	13	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
18.	1169/4744	Dhana laksmi	55/F	House Wife	25-08-07	03-09-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
19.	1405/9767	Neelvathy	50/F	Labour	20-09-07	30-09-07	11	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
20.	1415/1055	Velankanni	42/F	Labour	21-09-07	30-09-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food

HAEMATOLOGICAL EXAMINATION – IN PATIENTS

Sl. No.	I.P. No.	TC	DC			Bl. U	E S R Before Tt		Hb % BT	After Treatment			Before Treatment Motion Test			After Treatment Motion Test		
		BT	P%	L%	E%		½ hr mm	1 hr mm		ESR		Hb	Ova of E.h	Cyst of E.h	Occult Blood	Ova of E.h	Cyst of E.h	Occult Blood
										1/2hr	1 hr	mg%						
1.	269/8234	8500	60	35	5	18	25	50	9	6	12	10	-	Present	-	-	Absent	-
2.	281/8864	10,000	54	39	7	20	25	54	9	3	6	10	-	Present	-	-	Absent	-
3.	322/914	9,000	55	41	4	22	20	42	9	4	6	11	-	Present	-	-	Absent	-
4.	622/2735	9,400	58	40	2	24	12	29	10	4	8	10	-	Present	-	-	Absent	-
5.	620/2620	8,000	62	30	8	22	20	44	8	6	8	11	-	Present	-	-	Present	-
6.	790/8517	8,100	58	35	7	26	24	54	9	5	12	10	-	Present	-	-	Absent	-
7.	773/8332	8,400	52	42	6	20	4	8	9	4	10	10	-	Present	-	-	Absent	-
8.	805/9237	8,800	55	40	5	28	25	54	8.5	4	8	14	-	Present	-	-	Absent	-
9.	863/1625	11,000	58	38	4	24	11	27	9.5	3	8	11	-	Present	-	-	Absent	-
10.	872/1821	9,300	62	32	6	32	5	12	9	5	6	11	-	Present	-	-	Absent	-
11.	936/4491	10,400	60	35	5	40	25	50	9	4	10	10	-	Present	-	-	Absent	-
12.	977/5598	8,600	64	30	6	24	6	14	8	6	8	10	-	Present	-	-	Absent	-
13.	1014/7395	10,500	63	30	7	45	15	34	9	6	12	10	-	Present	-	-	Absent	-
14.	1102/2057	8,200	55	40	5	26	32	60	9	5	10	10	-	Present	-	-	Absent	-
15.	1120/2855	8,700	62	32	6	22	34	60	9	4	10	11	-	Present	-	-	Present	-
16.	1152/4183	8,100	60	35	5	24	25	52	8	5	12	10	-	Present	-	-	Absent	-
17.	1143/3953	8,900	58	38	4	26	5	10	10	5	10	10	-	Present	-	-	Absent	-
18.	1169/4744	9,100	66	30	4	20	20	44	11	4	8	12	-	Present	-	-	Absent	-
19.	1405/9767	9,000	55	40	5	24	12	24	9.5	5	12	11	-	Present	-	-	Absent	-
20.	1415/1055	8,500	58	38	4	28	6	12	9	6	12	11	-	Present	-	-	Absent	-

TC – Total Count: DC – Differential Count: P –Polymorphs: L- Lymphocytes: E – Eosinophils:
Hb – Haemoglobin: Blu – Blood Urea: E.h- Entemoeba histolytica:

LIST OF – OUT PATIENTS

Sl. No.	O.P. No.	Name of the Patient	Age / Sex	Occupation	Date of Admission	Date of Discharge	No.days Rt	Result	Medicine
1.	3645	Thanga Mariyammal	41/F	Sweeper	17-05-07	29-05-07	13	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
2.	9303	Maha lakshmi	19/F	Labour	04-06-07	19-06-07	16	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
3.	196	Shesathri	63/M	Labour	06-06-07	19-06-07	14	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
4.	8043	Bharani	23/F	House Wife	30-06-07	13-07-07	14	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
5.	339	Appavu	60/M	Business Man	07-06-07	19-06-07	13	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
6.	8645	Yuvaraj	14/M	Student	02-07-07	16-07-07	15	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
7.	4263	Aadithya	36/F	Teacher	04-07-07	26-07-07	23	Not Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
8.	1359	Meenambigai	35/F	Labour	06-07-07	17-07-07	12	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
9.	4975	Hemavathy	46/F	House Wife	06-07-07	19-07-07	14	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
10.	9	Valarmathy	35/F	Clerk	06-06-07	19-07-07	14	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
11.	3545	Akila	26/F	Student	16-07-07	24-07-07	09	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
12	3546	Steffy	20/F	Student	16-07-07	24-07-07	09	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
13.	1057	Karthik Raja	18/M	Labour	06-08-07	18-08-07	13	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
14.	351	Dhamothiran	60/M	Labour	04-08-07	15-08-07	12	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
15.	1691	Senthil	27/M	Former	08-08-07	29-08-07	22	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
16.	4486	Sathish	14/M	Student	15-08-07	28-08-07	14	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
17.	5310	Santhosh Kumar	14/M	Student	18-08-07	03-09-07	17	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
18.	7026	Venkatesan	34/M	Business Man	11-10-07	20-09-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
19.	7027	Tamil Vanan	28/M	Labour	11-10-07	20-09-07	10	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food
20.	7025	Kanmani	25/F	Student	11-10-07	21-09-07	16	Cured	1. Mangottai Paruppu Chooranam -1gm twice a day after food. 2. Jathikkai Karkam = 5gm with curd twice a day, after food

HAEMATOLOGICAL EXAMINATION – OUT PATIENTS

Sl. No.	O.P. No.	TC	DC			E S R Before Tt		Hb % BT	Bl. U	After Treatment								Before Treatment Motion Test			After Treatment Motion Test		
		BT	P%	L%	E%	½ hr	1 hr			TC	P	L	E	ESR		Hb	B.U	Ova of E.h	Cyst of E.h	Occult Blood	Ova of E.h	Cyst of E.h	Occult Blood
														½ hr	1hr		%sm						
1.	3645	9200	58	38	4	20	32	9	24	9500	58	38	4	8	14	10	24	-	Present	-	-	Absent	-
2.	9303	8,900	60	35	5	15	34	8	28	9000	61	35	4	7	14	10	28	-	Present	-	-	Absent	-
3.	196	8,100	62	32	6	20	40	11	24	9000	64	33	3	10	15	12	24	-	Present	-	-	Absent	-
4.	8043	8,700	60	35	5	25	35	10	26	9500	60	36	4	10	14	11	26	-	Present	-	-	Absent	-
5.	339	8,600	63	30	7	15	35	9	30	9000	63	34	3	7	14	11	24	-	Present	-	-	Absent	-
6.	8645	9,800	66	30	4	20	30	8	32	9500	66	32	2	6	12	10	26	-	Present	-	-	Absent	-
7.	4263	8,000	55	40	5	25	40	9	24	9000	60	38	2	10	16	10	30	-	Present	-	-	Present	-
8.	1359	8,500	58	38	4	20	32	9	23	9000	58	40	2	6	12	11	28	-	Present	-	-	Absent	-
9.	4975	9,400	56	42	2	16	30	10	30	9500	56	42	2	5	10	12	24	-	Present	-	-	Absent	-
10.	9	10,000	60	35	5	17	28	11	34	10500	60	35	5	4	8	12	26	-	Present	-	-	Absent	-
11.	3545	8,400	66	30	4	15	30	9	24	9000	60	32	2	3	9	10	24	-	Present	-	-	Absent	-
12.	3546	8,000	58	38	4	18	34	10	27	8500	58	39	3	4	8	11	30	-	Present	-	-	Absent	-
13.	1057	8,500	55	42	3	20	40	11	28	9000	56	42	2	10	15	12	26	-	Present	-	-	Absent	-
14.	351	8,600	56	42	2	30	38	8	24	9000	61	36	3	5	10	10	28	-	Present	-	-	Absent	-
15.	1691	9,200	60	35	5	18	28	10	13	9500	55	43	2	4	8	11	24	-	Present	-	-	Absent	-
16.	4486	9,000	52	44	4	20	30	9	28	9500	54	42	4	11	15	12	24	-	Present	-	-	Absent	-
17.	5310	8,500	56	38	6	25	45	10	27	9000	60	37	3	10	16	13	24	-	Present	-	-	Absent	-
18.	7026	8,000	60	36	4	20	38	10	25	8500	60	38	2	15	20	11	25	-	Present	-	-	Absent	-
19.	7027	9,500	56	42	2	20	40	12	24	9500	56	40	4	10	16	13	20	-	Present	-	-	Absent	-
20.	7025	9,000	60	35	5	20	40	10	24	9400	55	40	5	9	14	12	24	-	Present	-	-	Absent	-

TC – Total Count: DC – Differential Count: P –Polymorphs: L- Lymphocytes: E – Eosinophils:
Hb – Haemoglobin: Blu – Blood Urea: E.h- Entemoeba histolytica:

DISCUSSION

DISCUSSION

Kirani noi is a clinical entity described by yugi munivar in his yugi vaidhya chinthamani. The classical clinical features are grambling pain in the abdomen. Diarrhoea, mucus with blood in the stool, offensive odour of stool, nausea and vomiting, tenderness, tenesmus pain, alternative constipation, fever, borborygmus, plunching.

20 patients of females were selected and admitted in the Inpatient ward of Arignar Anna Govt.Hostpital of Indian Medicine attached to Govt.Siddha Medical College, Arumbakkam, Chennai-106.

All necessary investigations were carried out to all patients and trial medicines were given. Regular daily follow up were done. All the cases were strictly advised to attend O.P. after discharged from Inpatient ward. Total duration of treatment ranges from 2 weeks. Chronic cases needed a long-term treatment vary in between 14-30 days.

Another 20 patients were treated in Outpatient department. All the patients were advised, to follow strict personal hygiene, community prophylaxis and diet.

1. Age:

Out of 20 cases among the total number of patients according to age distribution there was no case below 30 years. High incidence of cases was noted in age ranging of 51-60 during the study.

2. Sex:

Out of 20 patients, 100% of cases were females. Among them 65% of the patients were in menopause and 35% of the patients were in reproductive phase.

3. Religion:

Out of 20 patients, 17 were Hindu patients, 3 patients was Christians. Kirani Noi affects the people any religion and race.

4. Socio-Economic Status:

During the study 50% of cases were from poor Socio-Economic status and 35% from middle class population 15% from high-class. People living in poor socio-economic status were more affected because of life style and environmental factors.

5. Food Habits:

According to dietary incidence among 20 patients, 60% were vegetarian, 40% were mixed diet. The disease exists due to use of raw vegetables and fruits.

6. Personal Habits:

Among 20 patients, 30% cases were habits like betel nut & Tobacco Chewer, 10% cases were Snuff users, 60% cases were did not have any such habits.

7. Paruvakalangal:

From the inference 40% of cases came during muthuvenil, 35% of cases came during kaar, 25% of cases came during elavenil kalam. Because during these months pitha vaatha & vaatha are provoked.

8. Thinai:

From the study 60% of cases from neithal nilamm, 20% of cases form mullai nilam (forest area) 10% were marutham nilam (fertile area) 10% were kurinji nilam (hill area). As per the study the prevalence of disease was more in neithal & mullai nilam as said by siddhars.

9. Vali:

From this study in vali kutram, abanan & pranan is affected 100% of cases, pranan is affected in 85% of cases, koorman is affected in 50% of cases. Devadathathan is affected in 45% of cases, samanan is affected in 40% of cases. Because derangement of abanan causes diarrhoea, mucus with blood in the stool.

10. Azhal:

In this observation 100% of cases sathagam was deranged. 90% of cases analagam was deranged. Because most of them were affected by these symptoms like diarrhoea, grambling pain in the abdomen, nausea and vomiting, borborymus, alternative constipation.

11. Iyyam:

In this observation kilathagam was affected in 60% of cases, pothagam was affected in 50% of cases, santhigam was affected in 45% of cases, because among 20 patients most of them having diarrhoea, dyspepsia, nausea, vomiting, bornorygmus

12. Ezhu Udal Kattukkal:

Among 20 patients saram was deranged in all cases. Senner was deranged in 85% of cases, Oon was deranged in 70% of cases. Kozhupppu and enbu was deranged in 10% of cases.

13. Enn Vagai Thervugal:

From this study, 100% (Erugal 30% & Elagal 70%) of cases were affected by malam, 70% of cases were affected by deranged azhal valikuttram, vali azhal in 30% of cases, 70% of cases were affected by siruneer & naa, 45% of cases were affected by vizhi.

14. Duration of Illness:

Among 20 cases, the duration of illness were ranged from 14-30 days. Most of the patients 80% had the illness, with in 4 weeks.

15. Laboratory Findings:

Except the haemoglobin, E.S.R level all other routine examinations were found to be normal in all cases. Haemoglobin level ranged from 8-12gm in 20 patients. E.S.R level ranged from ½ hr – (4-34mm) 1hr- (8-60mm) in 20 patients.

16. Special Investigations:

E.h.cyst seen in only 2 patients. Motion test for occult blood showed negative in 20 patients.

MODE OF ACTION OF TRIAL MEDICINES:

Based on Suvai:

The trial medicines, act as oppurai aspect. Because, both are astringent in taste. Astringent controls and arrests the diarrhoea.

"gjjkj fhggd NgRk ghfhuk
Rjj JtNuhL nrhyydgGr-rjjhFk"
(fz Zrhkak) Neha ehly Neha Kjdhly -Part –I, Page No - 22

So, the trial medicines, both are pacify the vitiated pitha vaatha & vaatha pitha kutrams.

PRECLINICAL SCREENINGS:

Qualitative Analysis of Trial Medicines:

1. Mangottai Paruppu Chooranam:

Acid Radicles : Carbonate, Sulphide.

Basic Radicles : Copper, Calcium, Potassium, Sodium.

Phytochemical Constituents: Starch, Reducing Sugar, Alkaloids, Tannic Acid, Albumin.

2. Jathikkai Karkam:

Acid Radicles	:	Sulphide, Borate.
Basic Radicles	:	Copper, Calcium, Potassium, Sodium.
Phytochemical Constituents:		Starch, Alkaloids, Tannic Acid, Albumin, Unsaturated compound.

Microbiological Analyses:

Mangottai Paruppu was highly sensitive to proteus, pseudomonas and moderated sensitive to staphylococcus organisms. Jathikkai Karkam did not show sensitivity to any organism.

Pharmacological Analysis:

Pharmacological studies of trial medicines, Mangottai Paruppu Chooranam and Jathikkai Karkam showed significant. Anti-diarrhoeal and anti protozoal effect in albinomice.

Toxicological studies of trial medicines proved that the medicines did not possess any toxic effect in acute toxicity and repeated dose toxicity.

Clinical Improvement:

The result of clinical improvement was graded as followed.

Good	-	85%
Moderate	-	10%
Mild	-	5%

Statistical Analysis of Clinical Study:

Statistical Analysis of Clinical Study were done from the subjective and objective parameters observed before and after treatment. Results of analyses showed that the difference was statistically significant.

So the pre-clinical and clinical studies were highly encouraging which is studied in 2 years. This is only a preliminary approach and the study may be undertaken with the same medicines in large number of patients to assess the further impact of the medicines on **"Kirnai Noi"**.

SUMMARY

SUMMARY

- A collective and comparative study of the disease kirani is made covering all aspects of disease enclosing siddha and modern aspects.
- The peak age incidence of kirani noi was found 51-60 years age group and male female ratio was 0:100.
- The prevalence of the disease was high among lower and middle class society i.e 85% patients.
- Among dietary patterns 60% were vegetarian diet.
- Seasonal incidence was maximum 40% muduvenil kalam, 35% at kaarkalam.
- Majority of patients (60%) from neithal nelam (costal area), 20% of cases from mullai nilam. (forest and its adjacent areas)
- Diagnosis by Envagai thervugal revealed that malam was affected in all patients due to keezhnokkukaal, as it vitiates in its power.
- Mircroscopical examination of stool is very useful to detail differentiate the E.h. cyst from other parasites.
- The clinical trial conducted in selected patients were satisfactory and encouraging.
- The cost of treating the disease Kirani is economical when compared to the recent advances and new modes of treatment.

CONCLUSION

CONCLUSION

- Kirani noi is a common disease of the present day society with increasing incidence day by day.
- The clinical trial has proved that "**Mangottai Paruppu Chooranam**" and **"Jathikkai Karkam"** are highly effective in the treatment of the disease "**Kirani Noi**"**.**
- The cost effectiveness with the trial medicines noted worthy.
- The trial medicines are both **"Mangottai Paruppu Chooranam"** and **"Jathikkai Karkam**" is in the taste of Thuvarppu.
- Astringent controls and arrests the diarrhoea

  "gjjkj fhggd NgRk ghfhuk

  Rjj JtNuhL nrhyydgGr-rjjhFk**"**

  (fz Zrhkak)Neha ehly Neha Kjdhly -Part –I, Page No – 22

  So, the trial medicines, both are pacify the vitiated pitha vaatha & vaatha pitha kutrams.
- My trial medicines act as oppurai aspect.
- Siddha medicine once again proves it self as a great boom to mankind.
- Thus this study will provide excellent scope in field of **"Siddha Medicine"** in the new millennium.

ANNEXURE

PREPARATION AND PROPERTIES OF TRIAL MEDICINES

ANNEXURE-I

PREPARATION AND PROPERTIES OF THE TRIAL DRUGS

MEDICINES ADMINISTERED

1. **Mangottai paruppu choornam:** 1gm twice a day, after food.

   Reference : (mooligai) Gunapadam page 744

2. **Jathikkai karkam :** 5 gm, with curd, after food twice a day.

   Reference: Agathiyar Attavanai vagadam page 159

TRIAL MEDICINE-I

Mangottai paruppu chooranam:

Reference	:	Gunapadam(mooligai)
Ingredients	:	Mangottai paruppu
Botanical Name	:	Mangifera Indica
Family	:	Anacardiaceae

Actions:

1. Anthelmintic
2. Astringent
3. Demulcent
4. Nutritive

ngh J f F z k:

“NgRNk rjg ngUf FQNrh> hffLgGk
tRNkh %yKW ntqnfhjgG – khRila
G+qnfhlil iajjssg NghlLf fdaytej
khqnfhliliaf fhzy thJ”

(Fz thflk %yif Page-744)

Purification of drug:

Mangottai Paruppu:

A paste of lime stone is applied over the mangottai paruppu, It is dried, washed and again dried.

Chemical Constituents:

Seeds : Isomyl alcohol, α-pinene, β-pinene, myrcene, limonene, methyl, propyl, isopropyl, butyl & iso amyl alcohols in seeds oil. Tannic acid (10%) turpentine. Amino acids, gallotannin, gallic & mangifera – digallic acids, Vit-c, galatouronan & glucan, riboflavin β-carotene and α-xanthophyll seen

Preparation:

It is fried up till it becomes golden yellow colour and it is powdered. Ref: Gunapadam (Mooligai Page No: 744)

Dosage: 1g twice a day. After food.

JATHIKKAI KARKAM: TRIAL MEDICINE-II

Ingredients:

S.No	Common name	Botanical name	Parts used	Ratio
1.	[hjfha	Myristica fragrans	Kaai	1 kg
2.	mjtlak	Aconitum heterophyllum	Root	1 kg

Purifiction of drugs:

1. **Jathikkai:** It is dried and then fried in Ghee.
2. **Athividayam:** It is dried and then fried.

Preparation of the drugs:

Purified Jathikkai, and Athividayam are mixed together and grinded for 1 hour. It is then made in to a fine powder stored in porcelain vessel.

Usage:

5 gm with curd, after food twice a day.

1. Jathikkai :(Myristica fragans**)**

Tamil Name : [hjfha

Family : Myrtaceae

Actions:

1. Stimulant
2. Carminative
3. Narcotic
4. Aromatic
5. Aphrodisiac
6. Tonic

nghJfFzk:

"jhJelk Ngj rUthr aQru Neha
XJRth rqfhrk clfuz – NtNjh
byffha tUkgz Nghk Vwwkay gjjq
Fyffh aUeJthfFf $w"

(Fzthflk %yif Page-430)

Chemical constituent:

Phenyl, Propanoids the essential oil is stimulant and carminative and is administered in atonic diarrhoea and dysentery.

Athividayam:

Botanical Name : Aconitum hetrophyllam

Tamil Name : mjtlak

Family : Rananculaceae

Actions:

1. Stomachic
2. Astringent
3. Febrifuge
4. aphrodisiac
5. Tonic
6. Antiperiodic

nghJfFzk:

“mjt lakrhff uhwGjNeha ntgG
nfhj kUT Ngj nahL Nfhio-vjh thej
vdWiufFk Nehaf $llk ,yyh jfwwtLk
Fdiw efhKiyaha $W”

(Fzthflk %yif Page-16)

Chemical constituents:

Aconitine, Benzyl ester, hydroxyl groups songorine.

MANGOTTAI PARUPPU

MANGOTTAI PARUPPU CHOORANAM

JATHIKKAI

ATHIVIDAYAM

JATHIKKAI KARKKAM

BIOCHEMICAL ANALYSIS

ANNEXURE-II

CHEMICAL ANALYSIS OF HERBAL PREPARATION

Preparation of Extract

5 gm. of **Mangottai Paruppu Choornam** is weighed accurately and placed in a 250 ml clean beaker and added with 50ml of distilled water. Then it is boiled well for about 10 minutes. Then it is cooled and filtered in a 100 ml volumetric flask and made upto 100ml with distilled water.

S.NO	EXPERIMENT	OBSERVATION	INFERENCE
1	**I .Test for Acid Radicals.**		
	1.**Test For Sulphate**:		
a)	2 ml of the above prepared extract is taken in a test tube. To this add 2 ml of 4% Ammonium Oxalate solution	Absence of white colour precipitate.	Absence of sulphate
b)	2 ml of Sodium carbonate extract is added with 2 ml of dilute Hydrochloric acid is until the effervescence ceases off .then 2 ml of Barium chloride solution is added.	Absence of white colour precipitate.	Absence of Sulphate.
2.	**Test for Chloride:** 2 ml of Sodium carbonate extract is added with dilute Nitric acid till the effervescence ceases .then 2 ml of Silver Nitrate solution is added.	Absence of Cloudy white precipitate.	Absence of Chloride.
3.	**Test for Phosphate :** 2 ml of the extract is treated with 2 ml of Ammonium Molybdate solution and 2 ml of concentrated Nitric acid.	Absence of yellow precipitate.	Absence of phosphate.

4.	**Test for Carbonate:** 2 ml of the extract is treated with 2 ml of Magnesium sulphate solution.	Presence of white precipitate.	Presence of Carbonate.
5.	**Test for Sulphide:** 1 gm of the substance is Treated with 2 ml of the concentrated Hydrochloric acid	Presence of rotten egg smelling gas.	Presence of Sulphide.
6.	**Test for Nitrate:** 1 gm of the substance is heated with copper turnings and concentrated Sulphuric acid and viewed the test tube vertically down.	Absence of reddish brown gas.	Absence of Nitrate.
7. a)	**Test for Fluoride and Oxalate:** 2 ml of the extract is added with 2 ml of dilute Acetic acid and 2 ml of Calcium chloride solution and heated.	Absence of white colour precipitate.	Presence of fluoride & oxalate
b)	5 drops of clear solution is added with 2 ml of dilute of Sulphuric acid and slightly warmed. To this, 1 ml of dilute Potassium permanganate solution is added	KmNo4 is not discolourised	Absence of fluoride & oxalate
8.	**Test for Nitrite :** 3 drops of the extract is placed on a filter paper. On that, 2 drops of Acetic acid and 2 drops of Benzidine solution is placed.	Absence of yellowish red colour.	Absence of Nitrite.
9.	**Test for Borate:** 2 pinches of the substance is made into paste by using Sulphuric acid and Alcohol (95%) and introduced into the blue flame.	Absence of green tinged flame.	Absence of Borate.

II	**Test for Basic Radicals:**		
10.	**Test For Lead:** 2 ml of the extract is added with 2 ml of Potassium Iodide solution.	Absence of yellow precipitate.	Absence of lead.
11. a)	**Test of Copper:** One pinch of substance is made into paste with concentrated Hydrochloric acid in a watch glass and introduced into the nonluminous part of the flame.	Presence of bluish green colour flame.	Presence of copper.
b)	2 ml of the extract is added with excess of Ammonia solution.	Presence of deep blue colour.	Presence of copper.
12.	**Test for Aluminium:** To the 2 ml of extract Sodium hydroxide solution is added on drops to excess.	Absence of white precipitate.	Absence of Aluminium.
13. a)	**Test for Iron:** To the 2 ml of extract 2 ml of Ammonium thiocyanate solution is added.	Absence of blood red colour.	Absence of Ferric Iron.
b)	To the 2 ml of extract 2 ml of Ammonium thiocyanate solution and 2 ml of concentrated Nitric acid added.	Absence of blood red colour.	Absence of Ferrous Iron.
14.	**Test for Zinc:** To the 2 ml of extract Sodium hydroxide solution is added in drops to excess.	Absence of white precipitate.	Absence of Zinc.
15.	**Test for calcium :** 2 ml of the extract is added with 2 ml of 4% Ammonium Oxalate solution.	Presence of white precipitate.	Presence of Calcium.

16.	**Test for Magnesium:** To 2 ml of extract, Sodium hydroxide solution is added in drops to excess.	Absence of white precipitate.	Absence of Magnesium.
17.	**Test for Ammonium:** To 2 ml of extract few ml of Nessler's reagent and excess of Sodium hydroxide solution are added.	No colour precipitate.	Absence of Ammoniun.
18	**Test for Potassium:** A pinch of substance is treated with 2 ml of Sodium nitrite solution and then treated with 2 ml of Cobalnitrate in 30% glacial Acetic acid.	Presence of yellowish precipitate.	Presence of potassium.
19.	**Test for Sodium:** 2 pinches of the substance is made into paste by using Hydrochloric acid and introduced into the blue flame.	Presence of yellow coloured flame.	Presence of sodium.
20.	**Test for Mercury:** 2 ml of the extract is treated with 2 ml of Sodium hydroxide solution.	Absence of yellow precipitate.	Absence of mercury.
21.	**Test of Arsenic:** 2 ml of extract is treated with 2 ml of Silver nitrate solution..	Absence of yellow (or) brownish precipitate.	Absence of Arsenic.
III	**MISCELLANEOUS:**		
22.	**Test for Starch:** 2 ml of extract is treated with weak Iodine solution.	Blue colour developed.	Presence of starch.
23.	**Test for reducing sugar:** 5 ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2 minutes and added 8 to 10 drops of the extract and again boiled for 2 minutes. The colour changes are noted.	Presence of green colour.	Presence of reducing sugar.

24. a)	**Test for alkaloids:** 2 ml of the extract is treated with 2 ml of Potassium iodide solution.	Absence of red colour.	Absence of alkaloids.
b)	2 ml of extract is treated with 2 ml of Picric acid.	Absence of yellow colour.	Absence of alkaloid.
c)	2 ml of the extract is treated with 2 ml of Phosphotungstic acid.	Presence of white precipitate.	Presence of alkaloid.
25.	**Test for Tannic acid:** 2 ml of the extract is treated with 2 ml of Ferric chloride solution.	Presence of black colour.	Presence of Tannic acid.
26.	**Test for unsaturated compound:** To 2 ml of the extract 2 ml of Potassium Permanganate solution is added.	Decolourised.	Presence of unsatured compound.
27.	**Test for Aminoacid:** 2 drops of the extract is placed on a filter paper and dried well. After drying 1% Ninhydrine is sprayed over the same and dried well.	Absence of violet colour.	Absence of Amino acid.
28.	**Test for Albumin:** 2 ml of the extract is added with 2 ml of Esboch's reagent.	Presence of Yellow precipitate.	Presense of Albumin.
29.	**Test for Type of compound:** 2 ml of the extract is treated with 2 ml of Ferric chloride solution.	Absence of green colour precipitate.	Absence of type of compound.

RESULTS:

The given sample contain:

Carbonate, Sulphide, Copper, Calcium, Potassium, Sodium, Strach, Reducing sugar, Alkaloids, Tannic acid, Albumin, Unsaturated compound.

Acid Radicals:

Carbonate, Sulphide.

Basic Radicals:

Copper, Calcium, Potassium, Sodium.

Miscellaneous:

Starch, Reducing sugar, Alkaloids, Tannic acid, Albumin.

CHEMICAL ANALYSIS OF HERBAL PREPARATION

Preparation of Extract

5 gm. of **Jathikkai Karkam** is weighed accurately and placed in a 250 ml clean beaker and added with 50ml of distilled water. Then it is boiled well for about 10 minutes. Then it is cooled and filtered in a 100 ml volumetric flask and made upto 100ml with distilled water.

S.NO	EXPERIMENT	OBSERVATION	INFERENCE
1	**I .Test for Acid Radicals.**		
	1.**Test For Sulphate**:		
a)	2 ml of the above prepared extract is taken in a test tube. To this add 2 ml of 4% Ammonium Oxalate solution	Absence of white colour precipitate.	Absence of sulphate
b)	2 ml of Sodium carbonate extract is added with 2 ml of dilute Hydrochloric acid is until the effervescence ceases off .then 2 ml of Barium chloride solution is added.	Absence of white colour precipitate.	Absence of Sulphate.
2.	**Test for Chloride:** 2 ml of Sodium carbonate extract is added with dilute Nitric acid till the effervescence ceases .then 2 ml of Silver Nitrate solution is added.	Absence of Cloudy white precipitate.	Absence of Chloride.
3.	**Test for Phosphate :** 2 ml of the extract is treated with 2 ml of Ammonium Molybdate solution and 2 ml of concentrated Nitric acid.	Absence of yellow precipitate.	Absence of phosphate.

4.	**Test for Carbonate:** 2 ml of the extract is treated with 2 ml of Magnesium sulphate solution.	Absence of white precipitate.	Absence of Carbonate.
5.	**Test for Sulphide:** 1 gm of the substance is treated with 2 ml of the concentrated Hydrochloric acid	Presence of rotten egg smelling gas.	Presence of Sulphide.
6.	**Test for Nitrate:** 1 gm of the substance is heated with copper turnings and concentrated Sulphuric acid and viewed the test tube vertically down.	Absence of reddish brown gas.	Absence of Nitrate.
7. a)	**Test for Fluoride and Oxalate:** 2 ml of the extract is added with 2 ml of dilute Acetic acid and 2 ml of Calcium chloride solution and heated.	Absence of white colour precipitate.	Presence of fluoride & oxalate
b)	5 drops of clear solution is added with 2 ml of dilute of Sulphuric acid and slightly warmed. To this, 1 ml of dilute Potassium permanganate solution is added	KMNo4 is not discolourised	Absence of fluoride & oxalate
8.	**Test for Nitrite :** 3 drops of the extract is placed on a filter paper. On that, 2 drops of Acetic acid and 2 drops of Benzidine solution is placed.	Absence of yellowish red colour.	Absence of Nitrite.
9.	**Test for Borate:** 2 pinches of the substance is made into paste by using Sulphuric acid and Alcohol (95%) and introduced into the blue flame.	Presence of green tinged flame.	Presence of Borate.

II	**Test for Basic Radicals:**		
10.	**Test For Lead:** 2 ml of the extract is added with 2 ml of Potassium Iodide solution.	Absence of yellow precipitate.	Absence of lead.
11. a)	**Test of Copper:** One pinch of substance is made into paste with concentrated Hydrochloric acid in a watch glass and introduced into the nonluminous part of the flame.	Presence of bluish green coloured flame.	Presence of copper.
b)	2 ml of the extract is added with excess of Ammonia solution.	Presence of deep blue colour.	Presence of copper.
12.	**Test for Aluminium:** To the 2 ml of extract Sodium hydroxide solution is added in drops to excess.	Absence of white precipitate.	Absence of Aluminium.
13. a)	**Test for Iron:** To the 2 ml of extract 2 ml of Ammonium thiocyanate solution is added.	Absence of blood red colour.	Absence of Ferric Iron.
b)	To the 2 ml of extract 2 ml of Ammonium thiocyanate solution and 2 ml of concentrated Nitric acid added.	Absence of blood red colour.	Absence of Ferrous Iron.
14.	**Test for Zinc:** To the 2 ml of extract Sodium hydroxide solution is added in drops to excess.	Absence of white precipitate.	Absence of Zinc.
15.	**Test for calcium :** 2 ml of the extract, is added with 2 ml of 4% Ammonium Oxalate solution.	Presence of cloudy white precipitate.	Presence of Calcium.
16.	**Test for Magnesium:** To 2 ml of extract, Sodium hydroxide solution is added in drops to excess.	Absence of white precipitate.	Absence of Magnesium.

17.	**Test for Ammonium:** To 2 ml of extract few ml of Nessler's reagent and excess of Sodium hydroxide solution are added.	No colour precipitate.	Absence of Ammoniun.
18	**Test for Potassium:** A pinch of substance is treated with 2 ml of Sodium nitrite solution and then treated with 2 ml of Cobalnitrate in 30% glacial Acetic acid.	Presence of yellowish precipitate.	Presence of potassium.
19.	**Test for Sodium:** 2 pinches of the substance is made into paste by using Hydrochloric acid and introduced into the blue flame.	Presence of yellow coloured flame.	Presence of sodium.
20.	**Test for Mercury:** 2 ml of the extract is treated with 2 ml of Sodium hydroxide solution.	Absence of yellow precipitate.	Absence of mercury.
21.	**Test of Arsenic:** 2 ml of extract is treated with 2 ml of Silver nitrate solution.	Absence of yellow (or) brownish precipitate.	Absence of Arsenic.
III	**MISCELLANEOUS:**		
22.	**Test for Starch:** 2 ml of extract is treated with weak Iodine solution.	Blue colour developed.	Presence of starch.
23.	**Test for reducing sugar:** 5 ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2 minutes and added 8 to 10 drops of the extract and again boiled for 2 minutes. The colour changes are noted.	Absence of green, yellow and orange colour.	Absence of reducing sugar.

24. a)	**Test for alkaloids:** 2 ml of the extract is treated with 2 ml of Potassium iodide solution.	Absence of red colour.	Absence of alkaloids.
b)	2 ml of extract is treated with 2 ml of Picric acid.	Absence of yellow colour.	Absence of alkaloid.
c)	2 ml of the extract is treated with 2 ml of Phosphotungstic acid.	Absence of white precipitate.	Presence of alkaloid.
25.	**Test for Tannic acid:** 2 ml of the extract is treated with 2 ml of Ferric chloride solution.	Presence of brown precipitate.	Presence of Tannic acid .
26.	**Test for unsaturated compound:** To 2 ml of the extract 2 ml of Potassium Permanganate solution is added.	Decolourised.	Presence of unsatured compound.
27.	**Test for Aminoacid:** 2 drops of the extract is placed on a filter paper and dried well. After drying 1% Ninhydrine is sprayed over the same and dried well.	Absence of violet colour.	Absence of Amino acid.
28.	**Test for Albumin:** 2 ml of the extract is added with 2 ml of Esboch's reagent.	Presence of Yellow colour precipitate.	Presense of Albumin.
29.	**Test for Type of compound:** 2 ml of the extract is treated with 2 ml of Ferric chloride solution.	Absence of green colour precipitate.	Absence of type of compound.

RESULTS:

The given sample contains

Sulphide, Borate, Copper, Calcium, Potassium, Sodium, Strach, Alkaloids, Tannic acid, Albumin, Unsaturated compound,

Acid Radicals:

Sulphide, Borate.

Basic Radicals:

Copper, Calcium, Potassium, Sodium.

Miscellaneous:

Starch, Alkaloids, Tannic acid, Albumin , Unsaturated compound.

MICROBIOLOGICAL ANALYSIS

ANNEXURE-III

MICROBIOLOGICAL ANALYSIS

Trial Medicines:-

1. **Mangottai Paruppu Choornam**
2. **Jathikkai Karkam**

Preparation of extract:

To 5 gms of drug, 50 ml of acetic acid was added and kept in a boiling bath for 20 minutes and then filtered.

The extract of the drug was tested with the following micro organism.

(i) Staphylococcus aureus
(ii) Escherichia Coli (E.Coli)
(iii) Klebsiella
(iv) Proteus
(v) Pseudomonas aeruginosa
(vi) Candida albicans

The tube dilution method was used as a homogenus dispersion of the drug more effective to test the anti microbial activity of the drug. Dilution method is used in preliminary screening of the antimicrobial activity.

To 5 ml of Nutrient broth culture 0.5 ml of the extract was added and the tubes were incubated at 37^0C overnight. The next day the tubes were examined for turbidity and subcultures were made. On nutrient agar plates control tubes without drug were also incubated.

The plates were incubated over night at 37^0C and the next day the reading was taken.

The reading was tabulated as follows.

For the concentration used in studies

Drug – I - Mangottai Paruppu Choornam

Drug – II - Jathikkai Karkam

Microorganism	Mangottai Paruppu Choornam	Jathikkai Karkam
E. Coli	NS	NS
Klebsiella	NS	NS
Proteus	HS	NS
Pseudomonas	HS	NS
Staphylococcus	MS	NS
Candida	NS	NS

★ NS - Non sensitive

★ MS - Moderately Sensitive

★ HS - Highly Sensitive

Result:

So the trial drug,

Jathikkai Karkam shows resistance to all the six micro organisms and Mangottai Paruppu Choornam shows,

(i) Highly sensitive to Proteus, Pseudomonas

(ii) Moderately sensitive to Staphylococcus

(iii) Resistance to E.coli, Candida and Klebsiella

PHARMACOLOGICAL STUDY

ANNEXURE-IV

PHARMACOLOGICAL STUDY

ACUTE DRUG TOXICITY

Determination of LD_{50}

LD_{50} of both the drugs ***Mangottai Paruppu Chooranam & Jathikkai Karkkam Chooranam*** was done as per OECD guidelines (Revised draft 423). The drugs ***Mangottai Paruppu Chooranam & Jathikkai Karkkam Chooranam*** falls under class 4 (LD_{50} > 2000mg /kg). The animals did not show any signs of toxicity and behavioral changes.

ANTIDIARRHOEAL AND ANTI PROTOZOAL EFFECT

Effect of drugs on Epsom salt induced Diarrhoea:

Swiss albino mice of either sex weighing between 20-25g were used for this experiment. They were housed in polypropylene cages in an air-conditioned area at 25 ± 2^0 c with 10: 14 hour's light and dark cycle. Animals were fasted for 24 hours before study with free access to water. Mice were divided into various group of treatment as shown in table. For each treatment at least six animals were used. Drugs were administrated 45 minutes before cathartics ($Mgso_4$2g / kg p.o) immediately after cathartic agent challenge animals were kept in polypropylene cages lined with filter paper at the bottom. Animals were observed for parameter such as time of occurrence of diarrhoea, number of total defections up to 4hr. In case of normal defecations, the numbers of defections were noted up to 4hr after drug administration.

Results & Discussion:

From the results obtained it is evidenced that M.P.C. and J.K protected the GIT from Epsom salt induced diarrhoea to the extent of 81.32% and 87.63%. The magnesium sulphate ($Mgso_4$) induced diarrhoea is presumed to be by osmotic properties and cholecystokinin production[2,3] Thus, anti diarrhoeal activity of Mankottai Paruppu Choornam and Jadhikkai Karkam against $Mgso_4$ induced diarrhoea in mice is complex in nature. A number of flavonoids have been reported to inhibit intestinal motility and secretion[4], they may presumably exert antidiarrhoel action[5].

Laxative containing magnesium cations or phosphate anions are commonly called saline laxatives. Their cathartic action is believed to result from osmotically mediated water retention, which then stimulates peristalsis. It also has been suggested that magnesium containing laxatives stimulate the release of

cholecystokinin, which leads to intraluminal fluid and electrolyte accumulation as well as increased intestinal motility. It is estimated that, for every additional mEq of Mg^{2+} in the intestinal lumen, fecal weight increase by about 7g[6].

Reference:

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Effect of Mankottai Paruppu Choornam and Jadhikkai Karkam on Epsom Salt induced diarrhoea

S.No	Groups	Time (min) Occurrence of diarrhoea	Total number of faeces	Total number of wet faecus	Total weight of faeces (mg)	Percentage protection (%)
1.	Control ($Mgso_4$2gm/kg)	49.5 ± 3.01	22.1 ± 1.01	18.7 ± 0.77	211.53 ± 3.46	-
2.	$Mgso_4$ + M.P.C (100mg/kg)	89.5 ± 2.92*	6.9 ± 0.70*	2.36 ± 0.25*	39.5 ± 3.43*	81.32
3.	$Mgso_4$ + J.K (100mg/kg)	95 ± 2.06*	9.46 ± 0.92*	3.18 ± 0.59*	26.33 ± 2.17*	87.63
4.	$Mgso_4$ + Diphenozylate (1mg/kg)	123.5 ± 1.54*	6.06 ± 0.59*	2.38 ± 0.28*	19.83 ± 1.97*	90.62

n = 6: P* <0.001 Vs control

Results are expressed as mean ± SEM

BIOSTATISTICS

ANNEXURE – V

BIO-STATISTICS

RESULTS OF STATISTICAL ANALYSIS OF SUBJECTIVE PARAMETERS OBSERVED BEFORE AND AFTER OF 20(N) PATIENTS KIRANI KAZHICHAL NOI GOVT. SIDDHA MEDICAL COLLEGE, CHENNAI-106.

During 2004-2005 & 2007-2008

The data's collected are subjective in manner and we have no units to measure **"Kirani Kazhichal Noi"**. So that we need not involve sophisticated statistical tools.

From the available data's we observed after the treatment, the patients recovered from **"Kirani Kazhichal Noi"** is considerable in number. Hence we are presenting the findings as follows.

Z-test & X^2 was used to compare percentage of patients with symptoms before and after treatment

S.No	Parameter	No.of. Patients			Proportion	Statistical Test Criterion	Probability (P) Value	Statistical Significance
		BT	AT	Relieved	Percentage Relieved			
1.	Grambling Pain in the Abdomen	14	2	12	90	$X^2 = 22.4$	0.05	Significant
2.	Increased frequency (below 10 times)	14	2	12	90	$X^2 = 22.4$	0.05	Significant
3.	Relatively copius	14	2	12	90	$X^2 = 22.4$	0.05	Significant
4.	Offensive Odour	14	2	12	90	$X^2 = 22.4$	0.05	Significant
5.	Blood & Mucus with stool	14	-	14	100	$X^2 = 14.04$	0.05	Significant

CASE SHEET PROFORMA

ANNENURES-VI

IP CASE SHEET PROFORMA

Govt. Siddha Medical College & Hospital, Chennai - 106

Post Graduate Department

Branch - I **"MARUTHUVAM"**

Case Sheet Proforma For "KIRANI KAZHICHAL NOI"

I.P.No.	:	Occupation	:
Ward. No.	:	Income	:
Bed No.	:	Nationality	:
Name	:	Religion	:
Age/Sex	:	D.O. Admission	:
Address	:	D.O. Discharge	:
		Total No. of days treated	:
		Result	:
		Diagnosis	:
Education	:	**Medical Officer Signature:**	

Complaints and Duration :

History of present illness :

History of past illness :

Personal History :

Family History :

Obstetric History :

Habits :

General Examination

Consciousness	:
Nourishment	:
Decubitus	:
Anaemia	:
Jaundice	:
Cyanosis	:
Clubbing	:
Generalised Lymphadenopathy	:
Oedema	:
JVP (Jugular vein Pulsation)	:
Engorged veins	:
Pulse Rate	:
Temperature	:
Respiratory rate	:
Heart rate	:
Blood pressure	:

Siddha Aspects:

I. Nilam (Places)

Kurunchi (Hill Area)	:
Mullai (Forest Area)	:
Marutham (Fertile Area)	:
Neithal (Sea Area)	:
Palai (Desert Area)	:

Paruvakalam (Seasons)

Kaar (Aavani-Puratasi)	:
Koothir (Iypasi-Karthigai)	:
Munpani (Maargazhi-Thai)	:
Pinpani (Maasi-Panguni)	:
Elavenil (Chithirai-Vaigasi)	:
Mudhuvenil (Aani-Aadi)	:

Yakkai (Udal Nilai)

Vatham	:
Pitham	:
Kabam	:
Kalappu	:

Mukkunam

Sathuva Gunam	:
Raasatha Gunam	:
Thamasa Gunam	:

Iym Pori / Pulangal (Sensory Organs)

Mei / Sensation	:
Vaai / Taste	:
Kan / Vision	:
Mooku / Smell	:
Sevi / Hearing	:

Kanmenthiriyam / Kanmavidayam

Kai / Koduthal :

Kaal / Nadaththal :

Vaai / Pesal :

Eruvai / Kazhiththal :

Karuvai / Ananthithal :

Mumalam

Malam :

Niram :

Nurai :

Erugal :

Elegal :

Moothiram :

Viyarvai :

Kosam

- Anna maya Kosam : (Udal thathukal)
- Pranamaya kosam : (Pranan + Kanmenthiriyam)
- Manomaya kosam : (Manam + Gnaenthiriyam)
- Vingana mayakosam : (Puththi + Gnaenthiriyam)
- Aanantha maya kosam : (Prana vaayu + Suluththi)

Pira Urupukalin Nilai

Iruthayam :

Puppusam :

Eraippai :

Kalleeral :

Manneeral :

Siruneeragam :

Siruneerpai :

Moolai :

Karuppai :

Uyir Thathukkal

Vali (or) Vatham

Pranan	:
Abanan	:
Viyanan	:
Uthanan	:
Samanan	:
Naagan	:
Koorman	:
Kirugaran	:
Devathathan	:
Danajeyan	:

Azhal (or) Pitham

Analagam	:
Ranjagam	:
Saadhagam	:
Aalosagam	:
Prasagam	:

Iyyam (or) Kabham

Avalambagam	:
Kledagam	:
Pothagam	:
Tharpagam	:
Sandigam	:

Udal Thathukal

Saaram	:
Senneer	:
Oon	:
Kozhuphu	:
Enbu	:
Moolai	:
Sukkilam/Suronitham	:

Ennvagai Thervu

Naa :

Niram :

Mozhi :

Vizhi :

Sparisam :

Malam

Niram :
Nurai :
Erugal :
Elegal :

Moothiram

Neerkuri

Neikuri

Vadha Neer :

Pitha Neer :

Kabha Neer :

Thondha Neer :

Naadi :

Modern Aspect

Systemic Examination (Gastro intestinal system)

Inspection:

1. General Contour of the abdomen :

   Appearance of Abdomen :

2. Umbilicus :

3. Movements of the abdominal wall :

4. Pulsation in the epigastric region :

5. Abdominal Distension :

6. Surface of the abdomen (Smooth and glossy) :

7. Peristalsis :

8. Dilated veins :

9. Hernial sites :

10. Pigmentations of the abdominal wall :

11. Striae :

Palpation:

1. Local (or) general rigidity :
2. Tenderness
    - General :
    - Caecal region :
    - Ascending colon :
    - Descending colon :
    - Transverse colon :
3. Thickening of colon :
4. Tumours :

Viscera:

5. Enlargement of liver and spleen :
    - Enlargement of Gall bladder :
    - Enlargement of Kidney :

Percussion:

- Fluid Thrill :
- Shifting dullness :

Auscultation:

- Peristalsis :
- Arterial bruit :
- Venous hum :

Other System

- Cardiovascular System :
- Respiratory System :
- Central Nervous System :
- Genito urinary system :

Laboratory Investigations

Blood:

TC		:
DC		:
ESR	1/2 hr mm	:
	1 hr mm	:
HB		:
Blood Sugar F & P.P.		:
Blood Urea		:
Serum Cholesterol		:
VDRL		:

Urine:

Albumin	:
Sugar	:
Deposits	:

Motion:

Macroscopic:

Amount	:
Odour	:
Colour	:
Nature (Blood, Pus, Mucus)	:
Reaction (Acid or alkaline)	:

Microscopic:

Ova of Entamoeba Histolytica	:
Cyst of Entamoeba Histolytica	:
Occult blood	:

Case Summary :

Final Diagnosis :

Medicines :

1) Mangottai Paruppu Chooranam - 1gm BD after food

2) Jathikaai Karkam - 5 gm with Curd BD after food

Medical Advice :

FOLLOW UP

S.No.	Clinical Features	Before Treatment	During Treatment	After Treatment
	Signs & Symptoms :			
1.	Pain in abdomen (Grambling)			
2.	Nature of Motion a) Frequency of Motion b) Quantityof Motion c) Odour of Motion d) Colour of Motion			
3.	Nausea and Vomiting			
4.	Tenderness			
5.	Tenesmus Pain			
6.	AlternativeConstipation			
7.	Fever			
8.	Borborygmus			
9.	Other if Any			

Govt. Siddha Medical College & Hospital, Chennai - 106

Post Graduate Department

Branch - I **"MARUTHUVAM "**

Discharge Case Sheet Proforma For "KIRUMIPITHAM"

I.P.No.	:	Occupation	:
Ward. No.	:	Income	:
Bed No.	:	Nationality	:
Name	:	Religion	:
Age/Sex	:	D.O. Admission	:
Address	:	D.O. Discharge	:
		Diagonosis	:

Medical Officer Signature:

Clinical Features

S.No.	Clinical Features	Before Treatment	During Treatment	After Treatment
	Signs & Symptoms :			
1.	Pain in abdomen (Grambling)			
2.	Nature of Motion a) Frequency of Motion b) Quantityof Motion c) Odour of Motion d) Colour of Motion			
3.	Nausea and Vomiting			
4.	Tenderness			
5.	Tenesmus Pain			
6.	AlternativeConstipation			
7.	Fever			
8.	Borborygmus			
9.	Other if Any (dyspepsia)			

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